

98th Congress
2d Session

COMMITTEE PRINT

WMCP : 98-28

SUBCOMMITTEE ON HEALTH
OF THE
COMMITTEE ON WAYS AND MEANS
U.S. HOUSE OF REPRESENTATIVES

PROCEEDINGS OF THE CONFERENCE ON
THE FUTURE OF MEDICARE



FEBRUARY 1, 1984

Prepared for use of the Committee on Ways and Means by its staff

SUBCOMMITTEE ON HEALTH
OF THE
COMMITTEE ON WAYS AND MEANS
U.S. HOUSE OF REPRESENTATIVES

PROCEEDINGS OF THE CONFERENCE ON
THE FUTURE OF MEDICARE



FEBRUARY 1, 1984

Prepared for use of the Committee on Ways and Means by its staff

U.S. GOVERNMENT PRINTING OFFICE

20-623 O

WASHINGTON : 1984

COMMITTEE ON WAYS AND MEANS

DAN ROSTENKOWSKI, Illinois, *Chairman*

SAM M. GIBBONS, Florida	BARBER B. CONABLE, Jr., New York
J. J. PICKLE, Texas	JOHN J. DUNCAN, Tennessee
CHARLES B. RANGEL, New York	BILL ARCHER, Texas
FORTNEY H. (PETE) STARK, California	GUY VANDER JAGT, Michigan
JAMES R. JONES, Oklahoma	PHILIP M. CRANE, Illinois
ANDY JACOBS, Jr., Indiana	BILL FRENZEL, Minnesota
HAROLD FORD, Tennessee	JAMES G. MARTIN, North Carolina
ED JENKINS, Georgia	RICHARD T. SCHULZE, Pennsylvania
RICHARD A. GEPHARDT, Missouri	W. HENSON MOORE, Louisiana
THOMAS J. DOWNEY, New York	CARROLL A. CAMPBELL, JR., South Carolina
CECIL (CEC) HEFTEL, Hawaii	WILLIAM M. THOMAS, California
WYCHE FOWLER, Jr., Georgia	
FRANK J. GUARINI, New Jersey	
JAMES M. SHANNON, Massachusetts	
MARTY RUSSO, Illinois	
DON J. PEASE, Ohio	
KENT HANCE, Texas	
ROBERT T. MATSUI, California	
BERYL ANTHONY, Jr., Arkansas	
RONNIE G. FLIPPO, Alabama	
BYRON L. DORGAN, North Dakota	
BARBARA B. KENNELLY, Connecticut	

JOHN J. SALMON, *Chief Counsel*

JOSEPH K. DOWLEY, *Assistant Chief Counsel*

ROBERT J. LEONARD, *Chief Tax Counsel*

A. L. SINGLETON, *Minority Chief of Staff*

SUBCOMMITTEE ON HEALTH

ANDY JACOBS, Jr., Indiana, *Chairman*

CHARLES B. RANGEL, New York	W. HENSON MOORE, Louisiana
HAROLD FORD, Tennessee	JOHN J. DUNCAN, Tennessee
JAMES M. SHANNON, Massachusetts	JAMES G. MARTIN, North Carolina
MARTY RUSSO, Illinois	

PAUL C. RETTIG, *Professional Staff*

SANDRA K. CARRER, *Professional Staff*

DIANA C. JOST, *Professional Staff*

FOREWORD

Projections of outlays and income for the medicare program make it plain that medicare is facing a major financial crisis and that before long the Congress must act to preserve it. As a society, we now take for granted the importance and necessity of the protection against health costs that medicare provides for the elderly and seriously disabled. It is unthinkable that Americans will let the medicare program be seriously compromised. But it is estimated that, perhaps by the end of this decade, the medicare hospital insurance trust fund will be exhausted and the program will not be able to meet its obligations.

The Committee on Ways and Means recognizes the need to begin now the search for solutions to this financing crisis. The Committee was therefore pleased this past November to sponsor, in conjunction with the Congressional Budget Office and the Congressional Research Service of the Library of Congress, a Conference on the Future of Medicare. As I believe the papers and the extensive discussions reproduced in these Conference Proceedings illustrate, the medicare financing problem is severe but we are not without innovative and challenging ideas to serve as a basis for working out an acceptable solution.

I want to take this opportunity to thank all who worked with the Committee on Ways and Means and its staff to make this conference a success. Paul Ginsburg and Marilyn Moon of the Congressional Budget Office not only wrote one of the conference papers, but also played a major role in the planning and preparation of the conference, as did Janet Kline of the Congressional Research Service. Thanks are also due to a number of other Congressional Research Service staff members, including Ms. Ruth Allison and Ms. Carol Hardy, whose efforts resulted in a smoothly run conference.

I want to extend the thanks of the Committee to the paper authors, commentators and panelists for their willingness to participate and the time and effort they devoted to making the conference the success that I believe it was. The conference was a fitting beginning to what will be a difficult and important process of identifying and building consensus for the actions needed to preserve and strengthen the medicare program.

DAN ROSTENKOWSKI,
Chairman, Committee on Ways and Means

PREFACE

This volume contains the commissioned papers, the written remarks of the lead commentators, and the full transcript of the Conference on the Future of Medicare. The conference was organized by the staff of the Committee on Ways and Means in conjunction with the Congressional Budget Office (CBO) and the Congressional Research Service (CRS).

In February 1983, the organizers published a call for papers. The potential authors were urged to be bold in developing options, and to advocate a course of action, rather than present a balanced analysis. They were also requested to concentrate on one area of reform, rather than develop a comprehensive plan. The sponsors selected among the approximately forty proposals received on the basis of their quality and a desire to get a broad range of options, each of which had the potential to make a major contribution to the solution of medicare's financing problems.

With one exception, the views expressed in the papers are the sole responsibility of the authors. While some editorial suggestions were made to the authors, these focused on reducing redundancy among the papers and inadvertent errors of fact. The exception is the paper by Paul Ginsburg and Marilyn Moon, which is a statement of the CBO.

The volume is organized into two parts. The first contains edited versions of the papers prepared for the conference, and written versions of the remarks made by the lead commentators at the conference. The second contains an edited transcript of the conference. This includes summaries of the papers by the lead commentators, rebuttals by the authors, and extensive discussions by four panels of invited experts.

(v)

CONTENTS

	Page
Foreword	ii
Preface	v
PART I. COMMISSIONED PAPERS AND PREPARED CRITIQUES	
An Introduction to the Medicare Financing Problem	
Paper by Paul B. Ginsburg and Marilyn Moon.....	
Medicare's Financial Status—How Did We Get There?	
Paper: Irwin Wolkstein	12
Restructuring Medicare Benefits	
Paper: William C. Hsiao and Nancy L. Kelly	30
Response: Eli Ginzberg	49
A Medicare Voucher System: What Can It Offer?	
Paper: Bernard Friedman, Stephen A. LaTour, and Edward F.X. Hughes ..	55
Response: Harold S. Luft	79
Hospital Payment Under Medicare	
Paper: Judith R. Lave.....	87
Response: Bruce C. Vladeck	101
Physician Reimbursement Under Medicare: An Overview and a Proposal for Area-wide Physician Incentives	
Paper: Peter D. Fox	108
Response: Jack Hadley	120
Using Coverage Policy to Contain Medicare Costs	
Paper: H. David Banta, Gloria Ruby, and Anns Kesselman Burns	129
Response: Richard Rettig	143
Medicare Financing Reform: A New Medicare Premium	
Paper: Karen Davis and Diane Rowland	149
Response: Jack A. Meyer	162
Alternative Medicare Financing Sources	
Paper: Stephen H. Long and Timothy M. Smeeding	168
Response: Henry Aaron	187
PART II. CONFERENCE PROCEEDINGS	
Introduction	193
Benefits	202
Reimbursement	243
Technology	290
Financing	308
Conference Summary	349

Proceedings of the Conference on the Future of Medicare

PART I—COMMISSIONED PAPERS AND PREPARED CRITIQUES

AN INTRODUCTION TO THE MEDICARE FINANCING PROBLEM

(By PAUL B. GINSBURG and MARILYN MOON, *Human Resources and Community Development Division, Congressional Budget Office*)*

Medicare serves elderly and disabled individuals through two separate programs—hospital insurance [HI], which pays for inpatient hospital care, stays in skilled nursing facilities, and home health services, and supplementary medical insurance [SMI], which pays for all other services covered by medicare, principally physician and hospital outpatient services. The programs are financed through separate trust funds, with distinct sources of revenues.

Revenues for HI come for the most part from a portion of the social security payroll tax. Employers and employees covered by the program each contribute 1.3 percent of earnings up to a maximum (in 1984, the first \$37,800 of earnings), with the rate scheduled to increase to 1.35 percent in 1985 and 1.45 percent in 1986.¹ Under current law, general revenues cannot be used to make up any shortfall between outlays required to pay benefits and the balance in the trust fund.

In contrast, SMI revenues are obtained from premiums and general revenues. The premium amount (in 1984, \$14.60 per month) increases by law each year, with a contribution from general revenues making up the difference between premium income and outlays. In fiscal year 1983, general revenues required to meet this difference totaled about \$14 billion, or 77 percent of SMI funding.

The medicare program faces serious financing problems for the foreseeable future. Under current policies, the HI trust fund will be depleted around the end of the decade, while required contributions from general revenues to support physician benefits will continue to grow at a rate that far exceeds the growth in general revenues. The basic problem is that spending on medical care is growing more rapidly than national income, with demographic trends explaining only a small part of the difference.

* The authors would like to thank Hinda Ripps Chaikind of CBO's Budget Analysis Division for the projections and Nancy M. Gordon for valuable comments.

¹The maximum subject to payroll taxes increases each year in accordance with the increase in average earnings. Remaining revenues for the HI trust fund come from various intergovernmental transfers and interest on trust fund investments.

This introductory paper will assess the magnitude of the medicare financing problem and discuss its sources. A broad range of options for dealing with the problem will then be considered. The seven papers that follow will explore the potential of specific options in more detail.

THE PROBLEM

Projections over periods as long as 10 or 15 years are very imprecise. Nevertheless, the differences between growth in outlays and growth in revenues for both parts of medicare are so large that errors in forecasting are relevant only to dates and amounts—not to the conclusion that the program will face severe financing problems under current policies.

The root of the financing problems in both trust funds is the wide gap between the projected rates of growth of payments to medical care providers and revenues from payroll taxes and premiums. The projected growth in outlays is attributable primarily to rising medical care costs, and to a lesser extent to the aging of the population. A large part of the increase in costs is attributable to expansion in the volume of services provided. Volume of services as used here refers both to intensity of care—that is, changes over time in treatment practices for specific medical problems—and to the number of courses of treatment provided to patients. For example, victims of heart attacks now receive a more complex range of services than in the past, including additional tests and monitoring activities, which increase the costs of treatment. Moreover, some procedures, such as hip replacement operations, have increased in frequency as their safety and effectiveness have improved. Since medicare is committed to financing mainstream medical care for its beneficiaries, changes in medical care practice automatically are reflected in medicare outlays.

The HI problem

Depletion of the HI trust fund is projected around the end of the decade, most likely in 1990, under present policies (see table 1). The yearend balances are projected to decline after 1987, as annual outlays exceed annual income by increasing amounts. By 1995, the annual deficit would be over \$60 billion, or more than one-third of the projected outlays for that year, and the negative trust fund balance would total more than \$250 billion. These projections all assume continuation of present policies, and hence may be used as a baseline from which to measure the effects of alternative policies.

Two items cause an unusual degree of uncertainty in these projections. One is interfund borrowing. The old age and survivors insurance trust fund [OASI] has borrowed \$12.4 billion from HI. The projections here assume no further interfund borrowing and repayment of this loan by 1987. If the loan were not repaid by 1989, depletion of HI would occur in that year instead of in 1990.

TABLE 1.—BASELINE PROJECTIONS OF HOSPITAL INSURANCE TRUST FUND OUTLAYS,
INCOME, AND BALANCES

[By calendar year, in billions of dollars]

Year	Outlays	Income ^a	Annual surplus (excluding any negative interest)	Year-end balance
1981.....	30.7	35.7	5.0	18.8
1982.....	36.1	25.6	-10.6	8.2
1983.....	40.6	43.8	3.1	11.3
1984.....	46.5	46.3	-.2	11.1
1985.....	51.2	53.4	2.2	13.3
1986.....	57.3	66.4	9.1	22.4
1987.....	64.5	66.7	2.2	24.6
1988.....	72.5	66.8	-5.7	18.9
1989.....	81.5	70.7	-10.8	8.1
1990.....	91.7	74.5	-17.2	-9.1
1991.....	103.1	77.9	-23.8	-34.3
1992.....	115.8	81.1	-31.1	-69.0
1993.....	130.1	83.9	-39.7	-115.1
1994.....	146.2	86.3	-49.5	-175.1
1995.....	164.5	87.7	-60.9	-251.8

^a Income to the trust funds is budget authority. It includes payroll tax receipts, interest on balances, and certain general fund transfers. In years when balances are negative, income includes negative interest, which is the amount that would be paid by the trust fund on hypothetical borrowing required to continue benefit payments. Income in 1982 reflects \$12.4 billion in interfund transfers from the HI trust fund to the OASI trust fund. Income in 1984, 1985, 1986, and 1987 includes repayments of this loan according to a schedule projected by the Social Security Administration. The estimates assume that the interfund transfer will be repaid in full by 1987.

Note.—Minus signs denote deficits.

Source: CBO estimates based on February 1983 budget and economic assumptions, but updated to reflect the Social Security Amendments of 1983 (Public Law 98-21).

The second cause of uncertainty is the extensive discretion given to the Secretary of Health and Human Services (HHS) to set payment rates to hospitals after 1985. At that point, hospital reimbursements are projected to be 9 percent lower than they would have been under the previous cost-reimbursement system.² The projections here assume that the Secretary will maintain the 9-percent reduction but not make further cuts.³ If the Secretary decided to cut reimbursements further—for example, if payments per admission were increased by only 1 percentage point more than the rate of increase of hospital input prices, the projected depletion date would be 1992 (see table 2). The projected deficits would still grow larger each year, even under this further restricted growth in

² This is in response to the reimbursement provisions of the Tax Equity and Fiscal Responsibility Act of 1982 and the language in the Social Security Amendments of 1983 that limits outlays for hospital services to the level that would have been experienced under previous law.

³ This level of stringency implies a rate of growth in payments per admission of approximately 3.5 percentage points more than the rate of increase of hospital input prices.

outlays. By 1995, the annual deficit would be about \$90 billion and the negative balance over \$90 billion.⁴

TABLE 2.—PROJECTIONS OF HOSPITAL INSURANCE TRUST FUND OUTLAYS, INCOME, AND BALANCES UNDER ASSUMPTION OF MORE STRINGENT DRG RATES AFTER 1985¹

[By calendar year, in billions of dollars]

Year	Outlays	Income ²	Annual surplus (excluding any negative interest)	Year-end balance
1986.....	57.3	66.4	9.1	22.4
1987.....	62.1	66.9	4.8	27.2
1988.....	68.3	67.1	-1.2	26.0
1989.....	75.1	71.5	-3.6	22.4
1990.....	82.6	75.9	-6.8	15.7
1991.....	90.9	80.1	-10.7	4.9
1992.....	99.9	84.6	-15.2	-10.4
1993.....	109.8	89.1	-19.4	-31.2
1994.....	120.8	93.6	-24.1	-58.4
1995.....	133.0	98.0	-29.5	-93.4

¹ Assumes diagnostic related group (DRG) rates are increased 1 percentage point per year faster than the increase in the hospital market basket.

² Income to the trust funds is budget authority. It includes payroll tax receipts, interest on balances, and certain general fund transfers. In years when balances are negative, income includes negative interest, which is the amount that would be paid by the trust fund on hypothetical borrowing required to continue benefit payments. Income in 1982 reflects \$12.4 billion in interfund transfers from the HI trust fund to the OASI trust fund. Income in 1984, 1985, 1986, and 1987 includes repayments of this loan according to a schedule projected by the Social Security Administration. The estimates assume that the interfund transfer will be repaid in full by 1987.

Note.—Minus signs denote deficits.

Source: CBO estimates based on February 1983 assumptions, but updated to reflect the Social Security Amendments of 1983 (Public Law 98-21).

Projections for the subperiod beginning in 1985, at which point most of the recent legislative changes will have been implemented, indicate in more detail the nature of the problem. Over the 1985-95 period, outlays are projected to grow at a 12.4-percent annual rate, while revenues from taxes are projected to increase at a 7.9-percent rate.⁵

This 12.4 percent annual growth in medicare outlays reflects the influences of general inflation, growth in the eligible population and its aging, and changes in the nature of hospital care. General inflation accounts for a significant portion of the increase in hospital costs, but does not itself contribute to the financing problem since it is also reflected in growth in revenues. Over the 1985-95

⁴ The longer the projection period, the more important is the assumption concerning the rates set by the HHS Secretary. The more stringent assumption described in the text implies a 27 percent reduction from the cost reimbursement baseline in 1995. Many would dispute the categorization of such a reduction as a continuation of current policies.

⁵ If not for the increase in the tax rate scheduled for 1986, the revenue growth over the period would be 7.1 percent per year.

period, the GNP deflator is projected to increase at a 3.8-percent annual rate. The "market basket," which is an index of prices paid by hospitals for labor, supplies, and capital goods, is projected to increase somewhat faster, at an annual rate of 5.7 percent.⁶

Changes in the age composition of the population are projected to account for 2.2 percentage points of the growth in HI outlays. Of this, 1.9 percentage points capture growth in the number of enrollees, while 0.25 percentage points reflect outlay implications of the expected aging of that population. While HI claims increase with age, the aging of the medicare population is not rapid enough to be a major contributor to outlay growth during this period.

The remaining cause of growth of outlays—changes in the nature of medical care that affect the elderly—is the most difficult to project, partly because it, in itself, is influenced by reimbursement policies. Extrapolating from medicare's experience under cost reimbursement, and removing the effects of the aging of the medicare population that were discussed above, real outlays per enrollee are projected to grow at about 4 percent per year after 1985. This includes both the impact of a higher admissions rate per medicare enrollee and more resources applied per hospital stay.

The projection of the growth rate of revenues from covered earnings reflects a forecast of the near-term performance of the economy and assumptions of moderate growth thereafter. The estimates for 1983 and 1984 were developed using the CBO economic forecast published in February 1983—updated to reflect the economy's performance to date—which reflects the current cyclical upswing; those for later years assume moderate noncyclical growth with gradually declining inflation. Whether the projected growth path is attainable with tax and spending policies now in place is uncertain, however. If the economy's performance is worse than projected, HI balances will decline more quickly.

The SMI problem

Problems raised by the rapid growth expected in SMI are closely related to concern over the size of the Federal budget deficit. Since, by law appropriations from general revenues to SMI must be sufficient to guarantee solvency of the trust fund, SMI does not face a financing crisis per se. Rather, concern arises over this part of medicare because the projected growth of SMI is so much higher than the growth of general revenues—that is, Federal tax revenues not earmarked for specific purposes—from which it draws support.⁷

Like HI, outlays under SMI are projected to increase rapidly, by almost 16 percent per year through 1988. To finance this increase, general revenue contributions will have to rise even faster—averaging about 17 percent per year.⁸ Consequently, the share of gener-

⁶ A difference between price increases for inputs and general inflation is not unique to hospitals. Since wage rates tend to increase in real terms, most firms face more rapidly rising prices for inputs than for their output. Generally, the difference is resolved by productivity gains.

⁷ General revenues include personal and corporate income taxes and most excise taxes and exclude payroll taxes such as those used to support social security and unemployment insurance.

⁸ The difference occurs because SMI premiums are scheduled to grow at a slower rate after 1985 when, under current law, their growth will again be limited by the rate of growth in the social security cost-of-living increase.

al revenues necessary to finance the SMI trust fund will rise from 3.7 percent to 5.7 percent between 1982 and 1988. If the share of general revenues contributed to the SMI trust fund were not allowed to rise, outlays would have to be reduced or premiums increased by almost \$27 billion over the 1984-88 period, an amount representing about 19 percent of all SMI expenditures for the period.

Projections of SMI growth beyond 1988 are difficult, but two possible scenarios are outlined to indicate the demands that SMI could place on Federal revenues. If both revenues and SMI outlays were to continue growing at the same annual rates now projected through 1988, SMI would require a transfer of almost 12 percent of general revenues not earmarked for other use in 1995. Alternatively, even if the growth of SMI outlays decelerated to an annual rate of 12 percent and general revenues rose by 8 percent annually, the share of such revenues necessary to fund SMI would still rise to over 7 percent in 1995.

Projections of the expected growth in SMI expenditures are based on past experience that indicates growth to be a product of an increase in the number of persons covered by medicare, higher prices for services rendered, and rising use of services per beneficiary—both in number of services used and in their composition. For example, between 1978 and 1982, total SMI benefits grew at an annual average rate of 21 percent. About one-tenth of this growth was attributable to expansion in the enrolled population, and the remainder to a combination of increases in prices and in the use of services.

Although it is difficult to separate the price and volume factors, changes in the latter are particularly important in SMI, accounting for almost half of total per capita growth in outlays. For example, total per capita physicians' services—which constitute over 72 percent of SMI benefits—grew at an annual rate of 18 percent.⁹ Over the 1978-82 period, the physician services component of the Consumer Price Index grew at an average annual rate of just over 10 percent. This figure is likely to be an overstatement of increases in prices paid by medicare, however, with the rate more likely to have been about 9 percent on average.¹⁰ The residual—representing just over an 8 percent annual growth rate—could be attributed to increases in the number of services and to a changing mix of services, which includes faster growth in services provided by specialists.¹¹

⁹ Outpatient and other services under SMI grew at an even faster per capita annual rate of 20 percent over the period, but since price and volume cannot be easily disaggregated for such services they will not be discussed further.

¹⁰ Some share of the physician component of the CPI also is likely to reflect changes in the nature of physician services over time, reflecting intensity as well as pure price increases. In addition, medicare uses an economic index that is intended to restrict the growth of the prevailing charge to the same rate as increases in operating expenses of physicians and in general earnings levels.

¹¹ Between 1975 and 1980, reimbursements to general practitioners grew at less than half the rate for all physicians, while the growth rate for physicians specializing in cardiovascular disease, ophthalmology, radiology, and pathology was higher than that for physicians as a whole.

OPTIONS FOR SOLVING THE PROBLEM

Given the magnitude of the problem facing medicare in the next decade, incremental approaches are unlikely to provide solutions. Moreover, simultaneous pursuit of incremental options might create inconsistencies and conflicts that would ultimately limit any reduction in medicare outlays. Consequently, the papers for this conference attempt to examine broad options for reducing costs or providing additional financing.

This introductory paper will not describe options in detail or evaluate them, but rather will provide an overview of the range of general approaches, an indication of how they are supposed to work, and a discussion of their potential interrelationships. Since a likely strategy would be to combine several options rather than to focus on just one, it is important to consider which approaches are complementary and how they might be structured to be most effective.

As described above, the problems facing medicare are essentially twofold: the volume of services per beneficiary is rising, and the unit costs of those services to the Federal Government are increasing rapidly. Unless options for change address these underlying problems, medicare likely will continue to face financial pressures.

Possible options for attacking medicare's financial problems can generally be classified into three broad categories: pay for fewer services; pay less for each service; and shift responsibility to beneficiaries or taxpayers.

Pay for fewer services

One of the criticisms often leveled at medicare has been its limited control over what medical care services are delivered. Payment schemes that reimburse on a fee-for-service basis provide few incentives to providers or beneficiaries either to limit the number of medical services or to use a lower-cost mix of services.

Some control over volume exists through medicare cost-sharing, and, more recently, through the introduction of a hospital prospective payment system based on diagnostic related groups (DRG's). Medicare does assess some cost-sharing on beneficiaries—particularly through SMI—which may cause them to limit use of services. The new DRG hospital payment system also gives hospitals the incentive to be more efficient in the treatment of each case, and might result in limiting the number of services associated with each hospital stay. On the other hand, it might also encourage additional admissions, and it does not improve incentives to provide only the most efficacious forms of care. For example, the DRG system provides no economic incentive to discourage choice of a more expensive surgical course of treatment rather than an alternative regimen with lower costs classified into a different DRG. Thus, even this major change in hospital reimbursement does not fully address the problem of volume of services.

Reducing the volume of services would require careful consideration of the efficacy and value of individual medical procedures. While some services might be readily discarded under closer scrutiny, significant reductions in volume would probably require forgo-

ing some services that are efficacious but whose medical benefits are judged to be small in comparison with their cost.¹²

Reductions in volume could be accomplished through incentives for providers or patients, or by direct controls by medicare or its designated agents.

The essence of an approach emphasizing incentives for providers would involve changing the unit of service that is reimbursed. An example is the DRG hospital payment system, which encourages economizing on the use of services within the hospital by basing payment on the diagnosis. At the direction of the Congress, the administration is studying a parallel approach for physician services.

Further broadening the unit of payment to encompass all medical services required by a patient over a year could greatly reduce volume. Under such a system, providers would economize on the number of hospital admissions as well as on the services ordered during each admission and on outpatient services. The health maintenance organization (HMO) is the best known provider organization that contracts to provide medical care on a per-person (capitation) basis, and it has demonstrated substantial reductions in volume compared with fee-for-service medicine. The Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) authorizes medicare to pay HMO's on a per-enrollee basis. A medicare voucher system has the potential of expanding the use of capitation to control volume by giving beneficiaries access to other organizations willing to provide care under capitation payment. Stimulating the development of alternative delivery systems that serve non-medicare patients would, in turn, make medicare voucher options more attractive.

In contrast to incentives for providers, cost sharing would reduce the volume of services by emphasizing incentives to the patient. Although little research exists on the effects of cost sharing on medicare beneficiaries, work available on the under-65 population indicates that use of services falls as cost sharing rises. The effect is especially pronounced for outpatient physician services. Since extensive private supplemental coverage is in place, however, increased cost sharing would largely shift costs to beneficiaries and others paying the premiums for supplemental coverage, rather than reduce the volume of services.

Direct controls on providers by medicare or its agents offer another alternative to reduce the volume of services. One example is utilization reviews by peer review organizations (PRO), which attempt to reduce volume by identifying uses of services that depart from the norms of medical practice. Another is limiting payment for difficult procedures to designated centers, where quality might be higher and prescribing of procedures might be more prudent. A third direct control option would end medicare coverage of very expensive procedures with questionable or small medical value.

Pay less for each service

Although reducing reimbursements for each unit of service provided can produce considerable short-run Federal savings, such ap-

¹² William B. Schwartz, "The Competitive Strategy: Will it Affect Quality of Care," in Jack Meyer, editor, *Market Reforms in Health Care* (American Enterprise Institute, 1983), pp.16-21.

proaches do not directly address the underlying problems leading to higher medicare costs. Indeed, lower reimbursements might aggravate problems with volume of services thereby offsetting some Federal savings. Cuts in physician reimbursement appear to have increased billings,¹³ and some have speculated that reducing hospital DRG rates too much could result in more attempts by providers to exploit the loopholes in the system than would otherwise be the case.

Restricted access to mainstream services for medicare beneficiaries is another concern if the level of reimbursements is severely restricted. When providers are required to accept medicare reimbursements as payment in full, as in hospital care, some providers may find the rates too low to continue to serve the medicare population, or providers continuing to serve medicare beneficiaries may be forced to offer a very different style of care. When assignment is voluntary, as in physician services—that is, when providers may seek amounts above medicare's rates from beneficiaries—the providers may pass on part of a reduction in Federal reimbursements to beneficiaries, or they may refuse to treat those patients who could not afford additional cost sharing.

Coordinating reductions in reimbursements with other payers could alleviate some of these problems, however. Providers would be more prone to increase efficiency and reduce the growth in input prices (especially wages) when opportunities for cost shifting are removed. Indeed, providers' greater strides at cost reduction might open possibilities for additional reimbursement reduction in the future. On the other hand, "all-payer options" tend to be more administratively cumbersome because it is important that rates that govern a hospital's entire revenue be "reasonable." Some feel that such regulation of payment reduces the potential for increased use of competition to control the volume of medical services delivered.

Shift responsibility to beneficiaries or taxpayers

Unless medical care costs can be readily brought into line by changes in reimbursement practices, it is likely that additional costs must be borne by beneficiaries, taxpayers, or both. Medicare beneficiaries could pay a greater share through across-the-board increases in premiums, premium increases restricted to higher income beneficiaries, or greater sharing of costs by the users of such care. Revenues for medicare could be increased from the payroll and general tax sources that now are used to finance the system or by moving to a different revenue scheme.

Beneficiary cost sharing.—The tradeoffs among the major options for shifting costs to beneficiaries are relatively straightforward: across-the-board increases would spread the burden among the greatest number of individuals, while tying cost sharing to use of services would have a somewhat greater impact on beneficiaries' incentives for use of care. The same reductions in outlays could be obtained from either approach.

¹³ Thomas Rice and Nelda McCall, "Changes in Medicare Reimbursement in Colorado: Impact on Physicians' Economic Behavior," *Health Care Financing Review*, vol. 3 (June 1982), pp. 67-86.

Using higher premiums for SMI or introducing an HI premium would be similar to tax increases—raising revenues to fund medicare outlays, without necessarily changing the structure or nature of the program—although the burden would fall on a different group of persons. If equal premium increases were deemed too harsh for low- or moderate-income elderly and disabled individuals, they could be differentiated according to income.

Cost sharing tied to the use of services would both shift costs onto beneficiaries and affect the use of services by some—thereby reducing the volume of services. The existence of private supplemental insurance for medicare means, however, that some beneficiaries are able to insulate themselves from the incentive effects of any additional cost sharing. These individuals would still pay a higher share of total costs—through higher insurance premiums—but would not be encouraged to use fewer services. Moreover, if some protection against catastrophic expenses is desirable for beneficiaries, there are a number of practical constraints on the implementation of additional cost sharing, especially since SMI already has a high degree of it.

Medicare vouchers might be viewed as an alternative to major increases in cost sharing. Vouchers—like cost sharing—could shift the burden onto beneficiaries, but also expand the range of choices available to beneficiaries. That is, the beneficiaries would be allowed to choose among a variety of benefit packages offering different combinations of cost sharing and coverage for different premiums.

Revenue increases.—The deficit could also be reduced through increased revenues. Increased revenues could be obtained by raising the payroll tax rate, levying a new tax and dedicating the revenues to the trust fund, or transferring general revenues to the trust fund. A number of considerations would be relevant to this choice. One is who should pay the additional taxes. Should it be the working population, the beneficiary population, or the broader population of all consumers? Another issue is the importance of maintaining the trust fund approach. Some would prefer the trust fund approach because it focuses attention on serious problems, although the fund could be brought into balance even if spending remained at the level projected under current policies. Finally, the overall budget outlook is relevant. With such large deficits projected for the foreseeable future, approaches depending heavily on transfers of general revenues would probably have to consider specific proposals for increasing general revenues.

Interactions among approaches

As has already been suggested, some of the options for changing medicare would resolve the financing problem through at least two of the three broad mechanisms. Cost sharing, for example, would both affect use of services and shift costs onto beneficiaries. Moreover, some of the specific approaches might be combined to reduce disadvantages that would occur if only one were adopted.

In general, if two options seek to change the same behavior, they cannot be expected to achieve combined savings equal to the sum of savings from each alone. For example, hospital coinsurance directed at shortening lengthy stays probably would not generate

savings as great as before the introduction of the DRG system, which is itself likely to discourage such behavior. On the other hand, since the DRG system may encourage additional stays in hospitals, new cost sharing might be implemented through higher or multiple deductible amounts to reduce incentives for hospital admissions. In this second case, the two options would serve as complements rather than substitutes.

Another area where careful coordination is needed is in designing ways to cut reimbursements to providers, while improving incentives for limiting use of care. For example, paying physicians less for each service performed would create incentives for increasing the volume of services provided. Consequently, simple reimbursement restrictions might need to be combined with constraints on use.

Since it might be necessary to employ a number of changes to achieve a sufficient reduction in costs and/or increase in revenues, another goal of coordinating options might be to insure that the burden of various changes is spread across many individuals, rather than being concentrated only on one group such as providers or beneficiaries. For example, if cost sharing were to be increased, any increase in tax revenues might be restricted to payroll taxes so as not to affect beneficiaries further. On the other hand, current beneficiaries, who paid little in taxes for HI, will draw out large amounts of benefits and it might be reasonable to ask greater sacrifices from this beneficiary group.

CONCLUSION

The medicare financing problem is a manifestation of a broader societal problem—the vastly different growth rates between health care spending and incomes available to pay for it. While the present HI “crisis” exists because outlays in the program are currently supported only by payroll taxes, the projected high growth rates in medicare outlays would be of concern even if other means of financing were used. Changing technology continually yields opportunities for additional medical services that have prospects of improving medical outcomes. Many are very costly, however, and current financing arrangements give only limited encouragement for weighing benefits of services against their costs. Changes in financing that would bring incentives to bear on decisions concerning the use of services are likely to be an important part of solving the medicare financing problem in particular and society’s problem in general. Solutions to medicare’s problems are not, however, likely to result from a single change, but rather will require a combination of approaches, making it particularly important to keep in mind issues of coordination and interaction among the options to be considered at this conference.

MEDICARE'S FINANCIAL STATUS—HOW DID WE GET THERE?

(By IRWIN WOLKSTEIN, *Principal, Health Policy Alternatives, Inc., Washington, D.C., and Former Deputy Director for Policy, Bureau of Health Insurance, Social Security Administration.*)

Last April, Alice Rivlin, then Director of the Congressional Budget Office, summarized the financial status of the medicare program. (Rivlin, 1983.) She pointed out that "the projected growth in outlays threatens the solvency of the hospital insurance (HI) trust fund." She also pointed out that "there were equally serious problems in the other part of medicare—supplementary medical insurance (SMI) * * *." She said, further, that "although SMI does not face insolvency in its trust fund, because transfers from general revenues are required by law, its increased outlays * * * are adding significantly to the Federal deficit."

These statements describe, in a nutshell, where medicare financing stands. This paper will start with a brief description of medicare's history and then discuss the circumstances which resulted in our present financial difficulties with the program. The paper will do so from three approaches. First, it will examine the cost estimating process and its relationship to the problem. Second, the paper will review some of the steps taken to respond to the problem. Finally, the paper will consider the implications of the current policies underlying medicare benefits and their financing.

To the degree possible and feasible, this paper relies for evidence upon written records of medicare history. In some cases, it was necessary to call upon the memory of the author who was a participant in and close observer of the actions, but his memory was checked against the recollections of some of the other participants and observers of the action on medicare over the 18 years of its life.

AN OUTLINE OF MEDICARE HISTORY

The beginning

Medicare was enacted during the closing days of an era when Federal policy was aimed at making the benefits of health care more widely available. This policy was implemented not only by easing access to services through medicare and medicaid's financing of patient services, but also by financing the creation of physical resources and the training of health manpower. The era was a time when more was clearly considered better, and some of its actions induced both additional services and additional costs that are continuing to this time and beyond.

The time of medicare's enactment was also a period of optimism in thinking about the future of the Nation's economy. Continuing

high rates of economic growth were generally expected, and the wealth of the country was believed to be sufficient to permit a share to be made available to protect the aged from insecurity arising from the costs of health services. Medicare's primary goal was to prevent major illness from spelling financial disaster for the older people of the country. The point has been made that the aged cannot be protected from dependency without health insurance that responds to the costs of illness as they occur, and only a social insurance program seemed capable of meeting the need. (Wolkstein, 1970.)

The era of 1965-71

The policy during the period 1965-71 was primarily aimed at medicare's initial goal. One of the most important of its initial policies was to require the desegregation of participating facilities, providing equal access regardless of race. Another of the initial policies was to maintain peaceful, cooperative relations between the program and providers of health services. As a consequence, there was an initial willingness by medicare to meet providers at least halfway to assure the adequacy of medicare payments. Medicare provided an array of policies aimed in this direction, including payment of 2 percent more than accounted-for costs, payment of accelerated depreciation, and very prompt payment of services. Furthermore, physicians' charges were considered reasonable at virtually whatever level they charged to medicare.

Despite the liberal medicare payment policy, hospitals have claimed, both when medicare started and ever since, that they were not being reimbursed full cost, meaning, at least sometimes, full charge payment or advance payment of part of capital costs and a contribution toward charity care. Medicare has always paid the losses on unpaid medicare copayments, and medicaid relieved hospitals of much of their bad-debt problem preexisting the enactment of the two programs, but hospitals have considered these contributions to be insufficient because they found it necessary to charge other payers more.

While very shortly after the medicare program went into effect the hospital insurance program was found to be underfinanced, the reaction during that period was not to tighten up on cost control, but rather to enact, in 1967, an increase in the contribution rates and the earnings base to which the contribution rate is applied, and to increase the earnings base again in 1971.

This is not to say that the high rate of increase in health costs in general and medicare costs in particular went unnoticed. As early as 1967, a National Conference on Medical Costs was convened to consider this problem. However, the conference conclusions were, perhaps, conspicuous by their failure to suggest restraint on the rates of medicare payment as a possibility for action. (U.S. Department of Health, Education, and Welfare, 1967.) Rather, the point was made over and over that what was required was a better organized health care system—a suggestion that is more easily made than implemented.

Some of the specific cost-related problems that might be solved by medicare policy or legislative modifications were analyzed in a Senate Finance Committee report in 1970 (staff to the Committee

on Finance, U.S. Senate, 1970.) This report included recommendations for some of the steps that were later taken either through regulation or other administrative action—dealing with accelerated depreciation and teaching physician reimbursement, for example—or legislation that was enacted in 1972.

A brief but interesting interlude in medicare history occurred under the Nixon economic stabilization program when increases in payments for hospital and physicians' services were restrained. However, when the general price control program ended in 1974, the controls on medicare payments also stopped.

The era of 1972-81

While the 1972 medicare legislation may mark the end of the era during which primary importance was placed on satisfying providers, the major step taken in 1972 consisted of the enactment of the extension of medicare coverage to the disabled and to persons suffering from end-stage renal disease, with a consequent large increase in medicare costs, and a provision that limited annual increases in the SMI premium to no more than the general increase in cash benefits, a change that has resulted in a large increase in the general revenue contribution to the program. While coverage of prescription drugs under medicare was quite widely supported before 1972 and since, this provision has never won sufficient support for adoption nor has any other major addition to benefits. The cost of the existing program undoubtedly increased congressional and administration reluctance to expand benefits.

The 1972 legislation marks the end of an era because of the many provisions that were adopted which were aimed, at least in part, at cost issues. These include:

1. Authorization to establish limits on costs recognized as reasonable;
2. Index limits on increases in prevailing charges for physician and other medical services;
3. Limitation on Federal participation in capital expenditures made contrary to State plans;
4. Restrictions on payment for the services of physicians in teaching settings;
5. Increase in the supplementary insurance deductible from \$50 to \$60;
6. PSRO provisions;
7. HMO enrollment option; and
8. Limit on institutional payments, generally, to the lesser of cost or charges.

However, in retrospect at least, we can conclude that these steps, while making medicare a greater force in directing the health care systems, were ineffectual as cost controllers.

The 1982-83 period

During the period 1972-81, there was a gradual, but not very stringent, administrative tightening of medicare rules that tended to hold down costs somewhat. However, estimates of the cost of the program showed continuing increases in the insufficiency of income to pay hospital insurance costs and large increases in general revenue support for SMI. Much more rigorous control of all

hospital costs was sought by the Carter administration as part of the cost control bill it supported, but which Congress did not agree to. However, a new mood to act on medicare costs emerged in the course of the Reagan administration's efforts to reduce budget expenditures for non-Defense programs. The acceptance of medicare and medicaid cutbacks seems part of a new recognition of the limited capacity of the Nation to support desirable programs and a willingness to use strong cost-control measures. From this recognition came the legislation of 1982 and, finally, 1983, when a prospective rate system was adopted for payment for medicare's hospital services. However, the program remains in the difficulty described by Alice Rivlin. Currently under consideration are further restrictions on physician payments, increases in the beneficiary share of SMI premiums, and increases in the SMI deductible. Passage of these proposals remains uncertain and, in any event, would do nothing to improve the hospital insurance financing.

A later section of this paper will discuss further some of the actions taken to deal with the medicare cost problem.

COST ESTIMATION FOR MEDICARE

Predicting the problem

The dire statements currently being made about the financial status of the medicare program might leave one with the impression that current forecasts that the Federal Hospital Insurance Trust Fund (FHITF) will be depleted in 1990 or 1991 (Board of Trustees, FHITF) under intermediate average cost estimates, or even 1988 under pessimistic assumptions, are something of a surprise. (These depletion forecasts, and all other statements made in this paper about hospital insurance financing, refer to intermediate costs, or costs estimated using intermediate assumptions.) While long-range projections of health costs and of balances in medicare's hospital insurance trust fund are difficult to make with precision, the fact is that all reports of the board of trustees of the fund since 1976 have reached similar conclusions to those being made today. The 1975 report concluded that the fund would be exhausted at the end of the period (1975-99) then being estimated (Board of Trustees, FHITF) and the subsequent annual reports all predicted exhaustion by about 1990 (Board of Trustees, FHITF.) In other words, today's financial problem cannot be attributed to failure by the actuaries to provide notice. Even the current heightened awareness of the problem does not assure quick action to solve it. It will be recalled that the timing of action with respect to similar problems with old-age and survivors insurance financing was delayed until that fund was on the brink of inability to pay benefits (Board of Trustees, Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds, 1982); and the 1972 crisis in hospital insurance financing was not resolved until the last possible moment.

Forecasting and contribution rates

While, in effect, the inadequacy of hospital insurance funding sources (almost all from payroll taxes) to finance benefits after the end of this decade has been forecast since 1976, it may be of some interest to examine the record in more detail (see table 1). It dem-

onstrates a continuing string of increases in estimates of long-range costs and continuing indications of need to shore up in greater and greater amounts the financing of the program. The cost estimates for medicare were controversial even before the enactment of the program and questions about the adequacy of financing were part of the argument against medicare's enactment. (Myers, 1970.) Even though the difference in the estimated cost of the program, as between the administration's actuaries and those of the insurance industry, had narrowed a great deal as enactment neared, and, even though the Congress adopted more conservative cost assumptions than those originally recommended by the administration, the insurance industry still estimated that costs would be about 26 percent higher than the 1.28 percent of payroll cost then being estimated by the administration actuaries.

TABLE 1.—AVERAGE COST AND ACTUARIAL BALANCE OF HOSPITAL INSURANCE AS A PERCENT OF TAXABLE PAYROLL

Year of trustees' report	Average cost intermediate cost basis ¹	Actuarial balance
1970.....	2.04	- 0.48
1971.....	2.20	- .62
1972.....	2.21	- .61
1973.....	2.67	- .04
1974.....	2.63	+ .02
1975.....	2.86	- .16
1976.....	3.39	- .64
1977.....	3.96	- 1.16
1978.....	3.86	- 1.12
1979.....	3.82	- 1.04
1980.....	3.80	- .99
1981.....	4.15	- 1.31
1982.....	4.62	- 1.85
1983.....	4.04	- 1.17

¹ In periods before 1981, intermediate cost is as referred to in the relevant reports of the board of trustees (assuming the earnings base would be kept up-to-date in the period before the law provided for automatic adjustments); and, after 1981, it is an average of Alternatives II-A and II-B. In periods before 1972, the cost includes only benefits and administrative expenses; but after 1971, it also includes an allowance for building and maintaining the trust fund level equal to 1 year's expenditures until 1980 and ½ year thereafter. The averages are calculated over a 25-year period beginning with the period in question.

Source: Annual reports of the Board of Trustees of the Federal Hospital Insurance Trust Fund.

By 1967, the Board of Trustees estimated, based on the first record of experience under the program, that costs were some 0.28 percent of payroll higher than the official estimates in 1965; and, it was estimated that the trust fund would be depleted in 1971 if remedial action was not taken. To remedy the financial imbalance, in 1967 the combined employer-employee contribution rate for each year, beginning in 1968, was increased by 0.2 percent of payroll; and, the annual earnings base to which the taxes were applied was increased from \$6,600 to \$7,800. According to the estimates of that

time, the action put the system back into balance. By 1970, the level cost was being estimated one-third higher than in 1967, even after assuming that the earnings base would be kept up-to-date in the future with rises in earnings (automatic indexing was not part of the original law). In 1972, the level cost was estimated higher by one-fifth than in 1970; and, it was forecast that the trust fund would be exhausted in 1973 without an improvement in financing provisions.

The 1972 response to impending bankruptcy was to provide for a very substantial increase in the contribution rate, not only to increase the maximum annual earnings to which the rate applied, but to make future increases in the maximum automatic, in line with an index of earnings. (Board of Trustees, FHITF.) The adoption of automatic adjustments in the earnings base was not enacted specifically with hospital insurance in mind, but was part of the plan that was designed to provide for automatic adjustments in cash benefit levels. The automatic system was intended to avoid the need for frequent legislative action, as had occurred regularly since 1950, to keep the social security system up to date.

However, the difficulties with forecasting medicare costs and the need to increase the contribution rate did not discourage the legislators from expanding the program in 1972. Possibly, they assumed that, by then, there was sufficient experience that in the future cost estimates would be more reliable. The legislation adopted in 1972 provided the only major expansion in medicare that was adopted during its history to date. In 1972, coverage of the disabled and of persons with end-stage renal disease was added to the program. As a consequence, level costs under the expanded program were estimated at 0.4 percent of payroll higher than the 1972 estimates for the original program. Furthermore, the new coverages expanded areas where there was little actuarial experience and raised the likelihood of serious errors of estimate. In the 1972 legislation, the average contribution rate was increased by 1.03 to 2.62 percent of payroll, with the excess of the estimated increase in revenues over the increase in expenditures flowing from the coverage liberalizations forecasted to result in close actuarial balance.

By 1975, however, the estimated average cost had increased to 2.85 percent of payroll, a smaller increase than had occurred in the 1965-72 period, but trouble with financing was once again being forecast. Despite increased estimates of cost since 1972, the contribution rates have not been increased generally since 1972. In fact, in 1973 and 1977, as part of a reconsideration of the relative financial needs of the various trust funds, the rates were decreased slightly for the period 1974-84 (see table 2). It has proved easier to propose increases some years in the future than to collect them immediately. When the contribution rate was reduced, the rate decrease was estimated to be offset by an increase in the earnings base that was enacted at that time. The rate reduction was made even though the result was to leave the trust fund with an estimated negative balance of 1.12 percent of payroll on an average cost basis. No changes, up or down, were made in the general contribution rate schedule since 1977, although, this year (1983) the rate for the self-employed was raised to make it equal to the combined employee-employer rate applied to wages. This and other steps that

were taken in 1982 and 1983 reduced both the hospital insurance deficit and the general fund obligation for SMI. These moves, made some years before disaster was expected to strike medicare, were made more with an eye to the Federal budget than to medicare's financial status.

The steps taken in 1982 and 1983 account for a drop in the estimated average cost of the hospital insurance program of 0.5-0.7 percent of payroll and a comparable drop in the deficit in financing the program. However, the deficit is still estimated at between 1.10 and 1.24 percent of payroll on an average cost basis. The deficit is still that large despite an estimated 1.32 percent of payroll which was, in effect, added to the balance principally by cost reductions provided under the 1982-83 legislation. In effect, the long-range percent of payroll cost estimates doubled from 1972 to 1983. Moreover, increases in the estimates of the average cost of the program as a percent of payroll just since 1980 more than offset the entire reduction in outlays in hospital insurance by actions taken under the 1982 and 1983 legislation. A substantial rise in the estimate of average cost occurred in the course of making estimates for 1981-83 after remaining essentially constant during the period 1977-80, so that the data suggest that serious difficulties with making long-range forecasts continue, although underestimating was at a lesser rate in the 1972-83 period than in the 1965-72 period.

While there have been large changes in the 25-year estimates, forecasts of the duration of time during which there would be a positive balance in the fund (until about 1990) have been reasonably consistent for the last 7 years. The difference in precision of forecasting results seem to show how much more difficult it has been found to provide consistent forecasts of medicare costs 25 years into the future as compared with making 10-year forecasts.

The assumptions and rules for estimating

Politicians' slowness to act to correct the trust fund imbalance since the early 1970's probably reflects their political commitment to the elderly and need to postpone, as long as possible, any bad news for this constituency. However, it may also reflect distrust of unfavorable actuarial projections and hope they will prove wrong. In fact, long-term projections have been difficult, and remain so today, but for different reasons than most people assume.

The problem in projection is not as strongly associated with fluctuations in inflation rates or utilization rates as some believe. This is because medicare includes automatic adjustments of both the taxable earnings base and total revenues, used to support the program offsetting general inflation, and adjustment of the beneficiary's share of program costs (copayments) that reflect inflation of hospital costs.

A serious problem in the projection is that health care costs and prices have been rising more rapidly than the taxable earnings base, especially in the last several years of recession, when high inflation has combined with the low increases in wages and high unemployment associated with a flat economy. This has created an urgent trust fund problem. How urgent comes down to how long and how fast health care costs can continue to rise and how long and how flat the rest of the economy will be.

The factors that account for rapid increases in health care costs can be identified. The ultimate question is, How much of the GNP will we want to spend for increased services, not only for Federal programs, but for the whole population? The tax rate must reflect this judgment, and it is not a judgment that the most skilled use of actuarial procedures can predict with any certainty. In fact, because of their doubts about the ability to make accurate longer range forecasts, the 1971 Advisory Council on Social Security, appointed according to provisions of the Social Security Act, recommended that the valuation period for estimating the hospital insurance program costs be reduced to 10 years. (Board of Trustees, FHITF.) This view allows politicians to justify delay by hoping the numbers will prove wrong.

While extending the range of forecasting introduces difficulties into the process, shorter, fixed-period forecasts have their own problem. For one thing, the estimated adequacy of financing becomes an important function of the particular period considered; and, as the period shifts, the relationship of income to outgo changes so that the estimate of adequacy changes. As long as the relationship between income and outgo is less favorable at the end of the estimating period than at the beginning, we must understand that as estimates for later periods are made, they will inevitably indicate higher costs as a percent of payroll and the difference may be substantial over a period of years. This is not a fault of the actuary and his projections, but of the legislative ground rules for the forecasts.

As was previously discussed to a considerable degree, the forecasting process is made less difficult because inflation that results in expenditure increases also tends to produce higher earnings in the general economy. However, unduly favorable assumptions about rises in earnings and resultant revenues for medicare will produce misleadingly optimistic predictions, as the medicare actuaries had the courage to point out some years ago (King, 1980). One of the potential problems with the economic assumptions is that, for political reasons, every administration tends to view optimistically the prospects for future economic growth (high) and inflation (low), no matter how dismal the past records may have been. We would expect at least some tendency to reflect administration views in HCFA's actuarial projections.

Another automatic adjustment in the system that eases the long-range prediction problem is provided by the so-called "dynamic deductible" in hospital insurance. The deductible and coinsurance levels in hospital insurance are automatically increased as hospital costs per day increase. This factor, too, eases somewhat not only the estimating but the financial problem because it shifts some of the rising hospital costs to the beneficiaries to pay out-of-pocket or through supplementary coverages. An idea for reducing the risk of inadequate medicare financing that was considered and was included in an amendment sponsored by then-Senator Ribicoff in 1974, would have applied a variable deductible to each day of hospitalization, with the deductible set to keep covered hospital costs constant relative to the earning base. This idea, if accepted, would have essentially eliminated the issue of the adequacy of hospital insurance financing. However, it did not gain wide support because of the

burden it would have put on beneficiaries, and because some, including Ways and Means Committee Chairman Wilbur Mills, as the author recalls, opined that such a shift of burden, even if legislated, would only be theoretical since it was unlikely that Congress would permit it to happen.

Despite the automatic adjustments that were adopted, forecasting medicare's hospital insurance financial status has been a difficult task. The bottom line to the forecast is the ratio of expenditures (benefits, administrative costs, and funds required to maintain an adequate fund balance) to income (contributions plus interest on the balance in the fund). Actual dollar levels come into the picture because they affect the value of the trust fund and its interest yield in relationship to expenditures.

As was previously mentioned, even the annual shifting of the 25-year period over which the costs are estimated importantly affects the estimated balance. The 1-year shift between 1982 and 1983 adversely affected the estimated balance by 0.18 percent of payroll (Office of Financial and Actuarial Analysis, HCFA.) Compounding a difference of 0.1 percent over a 10-year period would produce a difference in balance of over 1 percent of payroll so that what we expect will happen beyond the quarter century of current estimates has a very important bearing on what will happen to future predictions of funding adequacy unless end-of-period financing is as adequate as at the beginning.

The chief trick in the estimating process is to forecast medicare's increase in hospital benefit payments in relation to wages. These benefits increase as the rate of payment, per unit of service (the price) increases and as use increases. Use rises as the number of beneficiaries rise, as the beneficiaries age, and as hospital services use rises for a given age group. Hospital prices rise as the price of goods purchased by hospitals and salaries they pay to employees go up and as more services are included within a unit of services, after any offsets for productivity increases. Hospital prices have played, and are expected in the future to play, a far more significant role in medicare cost increases than have increases in use.

Hospital wages, on the average, have been rising more than wages in general; but, it is not clear to what degree the difference is the result of higher wages for similar work as opposed to paying the cost of growing complexity of hospital work that occurs with the introduction of new, advanced technology. The economics of the market would suggest that reasonably equivalent wages for similar work should, over the long term at least, be paid by hospitals to those paid in other fields so that, aside from different rates of input of technology, the impact on the cost of hospital wage rates should be about the same as that in the general economy. However, as a personal service industry, hospitals may not be able to incorporate productivity gains to offset labor cost increases as much as manufacturing concerns do.

Past medicare expenditure increases have significantly outpaced revenue increases. Ever since medicare was enacted and before, there has been a question about the duration and degree to which the rate of rising hospital costs can continue to outpace earnings in the general economy. This issue is not merely an issue for medicare or the Federal budget but for the entire economy. There is ob-

vously a limit to the degree to which the Nation's income will be spent on health care. Straight line projections of the past into the indefinite future yield nonsense results—amounts beyond what the economy could support. (Myers, 1970.)

While there is a limit to hospital cost increases relative to GNP based on affordability, it is difficult to determine where the limit lies in the period 25 or more years into the future. The real limit, in fact, is not fixed by physical laws but depends on the public perception of the relative value of health care and public preference for health care over other potential purchases. A higher limit will be accepted as the relative value of the service appears to grow and as income rises. Expenditures vary around the country in a way that seems strongly influenced by geographic variations in income levels (Levit, 1982) relatively more seems allocated to health care in States where income is high—and the same is true internationally. As a percent of GNP, health expenditures in 1976 in nine industrial countries varied from 5.8 percent in the United Kingdom to 9.7 percent in the Federal Republic of Germany and 8.7 percent in this country, with rises continuing. Finland seems to have accepted 15 percent of GNP a reasonable maximum for health expenditures (Freeland and Schlender, 1983) so that large future increases in American health expenditures relative to GNP are quite conceivable. However, precise prediction of such public policy based on results does not seem possible no matter how well the actuaries may do their work.

Medical insurance and the budget

There has been much less emphasis and concern expressed in public utterances with regard to the budget impact of increasing costs under either the hospital insurance or supplementary medical insurance parts of medicare than about the ability of the program to pay hospital insurance benefits in the future. For this reason, while costs for the medical insurance part (part B) of medicare have been rising essentially in parallel with those for hospital insurance, there has not been the same public call to solve this problem. The trustees' reports (Board of Trustees, Federal Supplementary Medical Insurance Trust Fund) merely report on the regular recalculation (required by the law) of the annual premium rates that provide funds adequate to finance part B, and there are no actuarial indications of fiscal difficulty for the medical insurance program.

One of the factors in increases in part B costs is the fact that the medical insurance has not had the financial advantage of a dynamic deductible. However, the annual deductible (\$50 originally) was increased to \$60 effective in 1973, and, in 1982, to \$75. These increases were much less than medical costs have risen since the initiation of the program, so that beneficiaries have had a large portion of their medical costs covered as the relative value of the deductible has declined. This factor has been reflected in the rising premiums.

While the rhetoric on the medicare financing crisis has emphasized the actuarial deficiency in hospital insurance, the cost-cutting legislation that was enacted recently was proposed in connection with budget legislation and was aimed largely at short-range ef-

fects. There are no signals that interest in solving medicare problems some years in the future has yet increased. It is not clear what the effect was of including the income and expenditures of the social security program, including medicare in a unified Federal budget in the sixties. This action had the initial political advantage of reducing the reported deficits in the general fund because, at that time, the trust funds were earning surpluses. In more recent periods, pressure on the unified budget has resulted in greater attention to the possibility of cuts in social security to offset the increased defense spending and the decline in revenues from large tax cuts. However, the real problem is not the publication of Government fund balances on a unified basis, but the impact of Government deficits and need to borrow on the economy. Unification or separation of the budget does not affect this impact, and it will be calculated and taken into account in either case.

Medicare costs versus total costs

At the same time that the Federal Government has become more concerned about medicare costs, the States and private purchasers have found the financial burden of State medicaid programs and health insurance for employees and others increasingly difficult to handle. A growing number of States have taken a variety of actions to try to limit the rise in health costs generally, and in medicaid specifically. A movement to form coalitions of private groups organized to take action to limit further health cost increases was started as the cost burden was felt more acutely. This is not to say that all the pressures are in the direction of lower costs. At the same time that action to hold down costs is going on, support is growing for payment for liver transplants as normal, not experimental, care—and the same support exists for any care widely perceived to improve health or save lives. Health cost limits seem universally approved only when achievable by the elimination of waste, and when no one is hurt by the cuts.

The point, nevertheless, is that the burden of health costs has essentially the same significance whether borne as part of the Federal budget or State budgets, or privately. Private and public sources are subject to the same pressures and policies for constraining and expanding costs. One of the principal differences is that, when health costs are borne through Government budgets, the burden is likely to be distributed in a fashion that is easier to bear than when similar costs are borne privately.

As is clear in table 3, both total national health costs and medicare costs have been rising sharply over the period of medicare's history more or less consistently with the way the practice of health care has changed. In 1981, medicare's hospital insurance costs were almost six times the 1970 level and medical insurance costs were more than six times the previous level. Over the same period, nonmedicare hospital costs (total costs less expenditures under medicare's hospital insurance) almost quadrupled and non-medicare physicians' services multiplied by almost 3½ times. It should be understood that much of the difference in the rates of increase in total costs is due to the growth and the aging of the medicare population, and another part derives from the increase in costs because the disabled and persons with end-stage renal disease

were covered under the 1972 legislation, rather than to higher medicare increases in use rates and prices.

ACTIONS TO CONTROL COSTS

1972 legislation

While the financial problem facing medicare remains very serious, a number of actions have been taken by the Federal Government aimed at holding down cost increases. The measures have included actions aimed both at volume of service and unit costs of services. Action aimed at adding control over the use of services was taken through the enactment of the PSRO program in 1972. At the same time, provisions limiting increases in physician's fees allowed by medicare were adopted. Increases in physician's fees were controlled by an index. Furthermore, in the same legislation, cost limits were authorized to be applied in determining the hospital costs that were to be reimbursable. Despite the legislative control on physician fee increases, medical insurance costs have continued to rise rapidly because of volume increases and because of leakage through the controls. The physician fee limitation was applied without developing a Federal definition of the various services for which fees were controlled. As a result, an unknown amount of leakage from control occurred by virtue of new services and changes in the content of services, including so-called depackaging—separate charges for parts of a service formerly charged for as a unit. Yet another source of leakage in the use of the index was that the index was based in part on the "costs" of practice in a period when costs increasingly included fringe benefits that physicians allowed to themselves.

One of the problems that accompanies more stringent controls for physician's fees is that if the physician bills the patient rather than billing medicare, the physician is free to charge any amount without limit, in effect shifting more of the costs of medicare-covered services to the patient. This shift has tended to reduce gradually the portion of beneficiary costs covered by medicare. This problem has inhibited more vigorous medicare action on physician fees. While the issue of whether assignment should be made mandatory has arisen periodically—even before the enactment of the original medicare law, and is currently under consideration again—concern about the effect on physician participation and the opposition of organized medicine have thus far aborted action on this matter. This is true even though the billings to patients of the difference between the physicians' total charges and those found reasonable by medicare have been the subject of the greatest number of complaints by medicare beneficiaries.

At the same time that physician fee payments were made subject to a fee limit, increasing the degree to which patients would likely be required to pay a sum in addition to medicare's payment, a limit was established on the rate of increase in medical insurance premium rates paid by beneficiaries. The limit was intended to prevent rises in part B subscriber premiums from outpacing cash benefit increases and excessively burdening the beneficiaries. As a result of this limit, beneficiary premiums fell from 50 percent of the total cost of part B to 25 percent. A step was taken in 1982 to prevent, at

least temporarily, a further decline in the percentage of premiums paid by beneficiaries. The recent budget problems seem to have created an important countervailing pressure to concern about the health cost impact on beneficiaries. However, this action to shift part of the burden to beneficiaries was very controversial and suggests that further, similar shifts will not be easily accepted.

An interesting development related to cost control occurred with regard to implementation of the end-stage renal disease legislation. The discretion left to the Secretary on this matter was used to administratively install relatively strict limits on payments per dialysis, to pay physicians treating patients on dialysis either on a monthly basis or through dialysis facilities, to establish virtually mandatory assignment for these patients, and to control the growth of renal facilities. Legislation providing for prospective payment for dialysis was enacted in 1981, 2 years before prospective rates were enacted for hospitals. While expenditures for treatment of end-stage renal disease have grown rapidly, the comparatively high growth rate is due chiefly to the increase in the number of patients treated, primarily because treatment resulted in an increasing number of survivors who suffer the illness. (Rettig, 1980.) The cost control efforts applied to renal disease appear to have been relatively successful in holding down unit costs.

In addition to the medicare changes, planning legislation was adopted that was also aimed at health costs. One of the goals of planning was to limit the growth of hospital plant to the necessary amount saving the costs associated with excessive plant. (Wolkstein, 1977.)

Carter cost containment proposal

The strongest proposal made thus far for Federal hospital cost control was included in the Carter cost containment plan, which was aimed not merely at limiting Federal costs but at all the hospital costs of the country, responding to the idea that health policy for medicare should parallel that for other population segments. This plan had two parts.

The first part limited hospital revenue increases each year. It was modeled on the economic stabilization program of the Nixon era. The Carter hospital revenue control measure was accompanied by a plan to place a limit on capital expenditures for hospitals on the theory that limiting the growth of hospital capacity would provide a long-term limit on costs and force choices on where both capital and service growth should be directed. Part of the theory was that capital expenditures limitations provided less of a threat to the financial status of hospitals than cost or revenue limitations. Capital limitations deal with future actions that are within hospital control and may be planned for in advance, while costs and revenues largely flow from decisions made over prior decades and limiting revenues sometimes imposes an immediate need to cut services, reduce staffing, and make other difficult or even impossible changes to keep costs within revenues.

Little enthusiasm developed in support of either of these Carter-supported measures in the Congress. However, the capital control ideas have apparently continued to intrigue persons concerned with health issues and are involved in current considerations in

New York, Michigan, and Massachusetts. All-payer controls on hospital costs are incorporated in State programs in New York, New Jersey, Maryland, Massachusetts, and Maine.

Actions in 1982 and 1983

The 1972 medicare cost control actions comprised virtually the entirety of Federal legislative activities to reduce costs until the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) and the Social Security Amendments of 1983 were enacted. TEFRA included a whole miscellany of small cutbacks, including the medical insurance premium action previously referred to. However, the 1983 legislation included the substitution of a hospital prospective payment system for the former reasonable cost basis of reimbursement and represents, by far, the biggest change in the medicare payment system in its history. Significantly, the cost control aspect of the plan is aimed at hospitals, not beneficiaries. This plan applies only to medicare, not to all payers, so that despite tight limits on medicare payments under this law, hospitals would have the opportunity to earn additional revenues from other payers, and this room for cost shifting provides something of a relief valve to the hospitals. However, the proponents of controls on all hospital costs arranged to include in the law a provision under which States could obtain waivers from the basic medicare prospective payment plan if they instituted one that applies to all payers. While the plan is quite stringent, considerable attention was paid to the presentations of hospital spokesmen concerning provisions required to maintain a vigorous hospital industry, and the legislation meets some of the concerns of the industry.

Development of prospective rate systems

The prospective payment plan is not an unexpected development. Even before medicare was enacted in 1965, various hospital reimbursement approaches were considered. (Wolkstein, 1968.) However, no prospective payment system had been developed to a degree that suggested that one could be confident that results would prove as acceptable as would a cost-based plan.

As early as 1977, however, legislation was adopted that permitted medicare to experiment with systems of incentive reimbursement to see whether research grants might be used to support development of a better reimbursement plan. The experiments that were conducted initially were entirely voluntary. As a result, it seemed unlikely that an effective cost control plan would be tested in the course of these experiments. Effectiveness in cost control would almost certainly produce at least some losers, and no one could be expected to volunteer to be a loser.

Legislation was proposed in the late 1960's that would have allowed compulsory participation in medicare experiments, but this legislation did not gain support. In 1972, however, provision was made both for State medicaid payment to hospitals to be on bases other than reasonable cost, as well as authority for the Secretary of Health, Education, and Welfare to analyze the alternate State payment systems that were applied and to develop prospective rate systems. These provisions triggered the State moves to test all-payer cost control systems and allowed the development of the in-

formation that has since become available on prospective rate systems. The States became arenas for testing prospective rate methods on a compulsory basis with Federal support.

In the course of this State and Federal effort, considerable progress was made on solving a problem that has for years inhibited the move to prospective rates. One of the principal concerns about the application of prospective rates was that the state of the art did not permit determination of whether a variation in cost between institutions resulted from differences in efficiency or differences in services provided, patients served, or quality of service. A prospective rate system that is cost neutral or cost saving requires a transfer of payments from some providers to others. To be acceptable, there must be considerable confidence that the penalized and rewarded institutions are reasonably selected. As a consequence of lack of such confidence, the 1972 legislation did not provide for prospective rates but provided instead for a cost-based system applying cost limits that penalized some hospitals but gave no rewards. Furthermore, because credible case mix measures were not available, the limits were applied only to routine services because the use of routine services is not as powerfully affected by patient mix, which could not be measured well, as is that of ancillary services.

With the acceptance of a new patient mix measure came adoption this year of a medicare prospective rate system applied to all services. The new prospective rate system is not a panacea, however. For one thing, some providers will, undoubtedly, find ways to take advantage of loopholes on the system. Also, the system is as open to increases in cost because of increases in admissions, as occurred under previous law. However, because the new system is applied on a stay basis, it normally provides the same payment regardless of the duration of the admission or volume of services provided within the stay so that some volume increases are inhibited. Furthermore, technological changes, one of the factors that has made cost forecasting for medicare difficult, appears to have been put much more under control. Major technological improvements, which change treatment processes will continue to have to be reflected ultimately in the prospective rate, but not immediately, so that expensive changes in technology are also inhibited somewhat, although changes in the mix of admissions will continue the move toward more complex DRG's with higher payment rates. Overall, the rate of future increases would seem to have been made more predictable in relation to general inflation under the new plan.

The final word on whether the plan will remain essentially as enacted depends on the acceptability of the reward and penalty system of the new legislation when it is tested out in practice. Even if accepted in principle, considerable further adjustments to improve the ratesetting techniques would not be surprising, especially if, as a consequence of penalties, access of patients to care is considered undesirably hampered in some localities.

Furthermore, the law provides considerable leeway for administrative discretion on the level of allowances to be made in future years for increasing payment rates to reflect cost increases resulting from service improvement. Actuarial forecasts require prediction of how this leeway will be used over the years as administrators in power change. In other words, public policy remains a pri-

mary factor establishing future costs. Forecasting in this area seems to fall more nearly into the realm of politics or social science or, perhaps, the reading of tea leaves than it does into actuarial science.

FINANCING IMPLICATIONS OF MEDICARE POLICY

The policy (or at least intentions) behind medicare legislation and administrative action has played and will continue to constitute the most important factor determining the financial status and impact of the medicare program. The use and cost of health services are not based on some scientifically determinable physical or natural law, but derive from the policy path the country decides, explicitly or implicitly, to take. Despite the new prospective payment legislation, the largely implicit policies that we follow in health care explain to a considerable degree our present health financing predicament and suggest that our problem with financing medicare will not be easily solved in the future. These unstated policies include:

General health policy

1. Taking a very short-term and pragmatic view to health cost goals—not seeking to establish any policy or course of implementation as to the intended portion of national income to be spent for health for the United States or the portion of the Federal budget to be spent on health care, except on a year-to-year basis.

2. Placing relatively high priority on health expenditures, compared with those for other purposes and providing support for making available the full available technology to preserve life and normal function, almost without regard to cost (witness recent public reaction to liver transplants). Public perception of health services seems different from its attitude toward other services.

3. Supporting adequate hospital financing for essentially all hospitals, despite their costs, to assure the people access to the services they may require.

Medicare policy

1. Providing medicare beneficiaries with health insurance coverage as good as is generally provided to the employed populations, thereby providing medicare beneficiaries with reasonably equal access to mainstream medical care.

2. Avoiding making significant shifts of costs from taxpayers to beneficiaries.

3. Deferring tax increases or other unpleasant actions to balance outgo and income of the hospital insurance trust fund until the last possible date, possibly implying a lack of confidence in the reliability of the forecasts.

As long as these policies hold, the Nation must be prepared to meet the rising financial demands that flow from its essentially generous health policy. The pragmatic and short-term expenditures policy will, in all likelihood, require periodic adjustment to financing provisions to match them to costs. Because it will remain impossible to predict long-term costs with accuracy, it seems equally impossible to legislate a definitive long-term financing plan. In

other words, relatively frequent readjustments of the financing provisions of the medicare system will likely continue to be a regular feature of the program well into the future. Only a very unexpected, to me at least, change in public policy toward support for health care can change this scenario.

TABLE 2.—EMPLOYEE CONTRIBUTION RATE SCHEDULES

[In percent]

	1965 act	1967 act	1972 act	Current law
1966.....	0.35			
1967.....	.50			
1968-72.....	.50	0.60		
1973.....	.55	.65	1.00	
1974-75.....	.55	.65	1.00	0.90
1976-77.....	.60	.70	1.00	.90
1978.....	.60	.70	1.25	1.05
1979.....	.60	.70	1.25	1.05
1980.....	.70	.80	1.25	1.05
1981-84.....	.70	.80	1.35	1.30
1985.....	.70	.80	1.35	1.35
1986.....	.70	.80	1.45	1.45
1987 and after.....	.80	.90	1.45	1.45

TABLE 3.—NATIONAL HEALTH EXPENDITURES AND MEDICARE EXPENDITURES

(Dollars in billions)

	Total	Percent- age of GNP	Hospital	Physicians	Total medicare	Hosp. ins.	Med/ ins. ¹
1960.....	\$26.9	5.3	\$5.7	\$2.0			
1965.....	41.7	6.0	13.9	8.5			
1970.....	74.7	7.5	27.8	14.3	\$7.4	\$5.3	\$2.1
1975.....	132.7	8.6	52.1	24.9	16.0	11.6	4.4
1980.....	249.0	9.5	100.4	46.8	36.8	25.6	10.7
1981.....	286.6	9.8	118.0	54.8	43.6	30.7	12.9

¹ For periods ending June 30.

Source: Waldo and Gibson, 1982, and Board of Trustees Federal Hospital and Supplementary Medical Insurance Trust Funds.

REFERENCES

- Board of Trustees, Federal Hospital Insurance Trust Fund. Annual Report of the Board of Trustees of the Federal Hospital Insurance Trust Fund, 1970-1983.
- Board of Trustees, Federal Supplementary Medical Insurance Trust Fund. Annual Report of the Board of Trustees of the Federal Supplementary Medical Insurance Trust Fund, 1970-1983.
- Board of Trustees, Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds, 1982 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Fund, 1982.

- Freeland, M.S., and Schendler, C.E., 1983. "National Health Expenditure Growth in the 1980's: An Aging Population, New Technologies, and Increasing Competition," *Health Care Financing Review*, March 1983.
- King, R.E. 1980. *Trustee's Reports*, June 5, 1980.
- Levit, K.R. 1982. "Personal Health Care Expenditures by State, Selected Years 1966-1978." *Health Care Financing Review*, December, 1982.
- Myers, R.J., 1970. *Medicare* (Richard D. Irwin, Inc.)
Office of Financial and Actuarial Analysis, Personal Communication, 1983.
- Rettig, R.A., 1980. *Implementing the End-States Renal Disease Program of Medicare*.
- Rivlin, A.M., 1983. *Statement Before the Special Committee on Aging, United States Senate*, April 13, 1983.
- U.S. Department of Health, Education, and Welfare 1967. *Report of the National Conference on Medical Costs*.
- Waldo, D.R. and Gibson, R.M., 1982. "National Health Expenditures, 1981," *Health Care Financing Review*, September, 1982.
- Wolkstein, I., 1968. "The Legislative History of Hospital Cost Reimbursement," *Reimbursement Incentives for Hospital and Medical Care—Objectives and Alternatives*.
- Wolkstein, I., 1970. "Issues: Medicare and Health Insurance," *Social Security: The First Thirty-Five Years*.
- Wolkstein, I., 1977. "The Impact of Legislation on Capital Development for Health Facilities," *Health Care Capital: Competition and Control*.

RESTRUCTURING MEDICARE BENEFITS

(By WILLIAM C. HSIAO, *Harvard University*, and
NANCY L. KELLY, *Policy Analysis Inc.*)

INTRODUCTION

Close behind the crisis over the financing of the social security system has arisen a similar concern about the fiscal solvency of the medicare program. The past several years particularly have witnessed a serious erosion of the medicare trust funds, brought about by sustained high rates of increase in benefit payments that have not been matched by increases in revenues paid into the medicare system. The increased benefit payments have resulted mostly from the rapid rise in medical costs, rather than the expansion of program benefits. The outcome of these trends, according to the Congressional Budget Office,¹ will be a deficit in the Hospital Insurance Trust Fund, one of the two that finances medicare. CBO projects that the deficit could occur as early as 1987 and that the annual deficit in year 1990 could be \$17 billion, increasing to \$61 billion in 1995.

This projected deficit has already prompted the Congress and the American people to focus their attention on the medicare program. Three general approaches to solving medicare's financial problems are likely to be considered: Stricter controls on payments to providers of service (the supply-side approach); more stringent financial requirements for medicare beneficiaries (the demand-side approach); and an increase in revenues through higher taxes, increased premium payments, or increased allocation of general revenue funds to medicare. With the projected annual Federal deficit of \$200 billion, the amount of additional Federal resources that could be allocated to medicare would be severely limited. The eventual solution, therefore, would likely involve a combination of all these approaches. The debate about the various options presents an excellent opportunity to reexamine medicare's structure and to consider some fundamental reforms.

Medicare was legislated almost 20 years ago. Rapid changes have taken place in health care during the intervening years. There have been dramatic changes in the health care delivery system. Numbers of physicians per capita have increased greatly, and access to health services has improved considerably. Developments in medical technology have accelerated. HMO's have spread, and for-profit firms are playing a greater role. Consequently, the anticipated crisis in medicare financing can be viewed as a stimulus to

¹ Paul B. Ginsburg and Marilyn Moon, "An Introduction to the Medicare Financing Problem," in Subcommittee on Health of the Committee on Ways and Means, U.S. House of Representatives, Conference on the Future of Medicare 98th Congress, 1st session (Nov. 29, 1983) pp. 6-7.

restructure the program, in light of our increased knowledge, for a changed environment.

While other papers focus on the supply-side solutions and new financing methods for medicare, this paper focuses on the demand-side approaches. It addresses the options for restructuring beneficiaries' financial participation in the program. Such a restructuring should serve two purposes: to improve the efficiency of the health care system, and to reduce the anticipated deficit. We view changes in the cost sharing provisions of the medicare program to be an important component of any overall policy changes that are made to solve the program's fiscal problems, but we believe that such changes should only be part of a multifaceted strategy.

THE CURRENT PROGRAM BENEFIT STRUCTURE AND COST-SHARING PROVISIONS

The medicare program is designed to finance acute medical care, mainly for elderly Americans. The program is divided into two parts: hospital insurance [HI] and supplementary medical insurance [SMI]. The HI component covers short-term hospitalization, skilled nursing care, and home health services, while the SMI portion covers physicians' services, outpatient hospital care and laboratory fees, as well as home health care. The program does not cover long-term nursing home care, dental care, or outpatient drugs.

Cost sharing is now imposed on medicare beneficiaries who use medical services. Under HI, a deductible amount approximately equal to the cost of the day in a hospital (\$356 in 1984) must be paid by beneficiaries who are hospitalized. Apart from this deductible, the HI program pays in full the cost of the first 60 days of hospitalization for an episode of illness. From the 61st through the 90th days, a copayment of \$89 per day (again, as of 1984) is required. Beyond the 90th day, each beneficiary has a lifetime reserve of 60 additional days but is assessed \$178 for each day that is used.

HI also covers up to 100 posthospital days in a skilled nursing facility [SNF]. After 20 days, the beneficiary is required to pay an amount per day that is equal to 12.5 percent of the inpatient hospital deductible (\$44.50 in 1984).

Under SMI, beneficiaries are responsible for an annual deductible of \$75, beyond which medicare pays 80 percent of the reasonable charges for covered services. If the provider's charges are reasonable according to medicare standards, then the patient's share will be 20 percent of the total. If they exceed such standards, however, the beneficiary is liable for the excess amount in addition to his or her 20-percent share, except when the physician accepts assignment.

State medicaid programs frequently serve to complement medicare for the poorest elderly. Medicaid may finance cost-sharing amounts, as well as other noncovered services, for eligible medicare beneficiaries who are too poor to pay these bills.

ARGUMENTS FOR COST SHARING

Patient cost sharing, the direct payment by consumers of some portion of the costs for medical care at the time of use, has been a topic of controversy throughout the long debate on insuring medical services. As the inflation in medical costs continues, observers have become increasingly pessimistic about the likely success of regulatory efforts. Attention has turned to the demand side, and to the potential benefits of cost sharing. Cost sharing promises economy; numerous empirical studies have found that cost sharing encourages reductions in the excessive use of medical services and makes the medical system easier to police.²

Several sound arguments justified the design of medicare's cost-sharing provisions. First, cost sharing reduces the cost of the program to the Government. Because the program must be financed through taxes or other revenues, one that is without cost-sharing provisions would require greater amounts of taxes or a reduction in funds available for other Federal programs. The use of cost sharing thus permits medicare to cover a broader range of services than would otherwise be possible.

Second, cost sharing makes the consumer cost conscious, discouraging the unnecessary use of services. Deductibles and coinsurance provide patients and physicians with an incentive to choose the most cost-effective forms of care. Without cost sharing, the burden of monitoring the appropriateness of care must be borne entirely by regulatory agencies. As discussed in the next section, considerable evidence has accumulated that the presence of cost sharing has a substantial effect on patients' overall demand for services as well as the mixture of services obtained. Cost sharing is increasingly recognized as an effective means of reducing inflation and providing incentives for the effective use of resources.

Discussions about the effect of cost sharing on demand for health services assume that patients initiate demand or that physicians act as their perfect agents. In fact, we do not know how well the agency relationship operates. As described later in this section, it has been argued that physicians are affected only indirectly by the cost-sharing requirements of their patients and, consequently, that cost sharing may not affect demand. However, it can also be argued that these indirect effects are sufficient to alter physicians' behavior as well as that of their patients. Physicians are generally aware of the financial implications of their decisions for their patients and may take that information into account in developing treatment protocols. The empirical studies of the effects of cost sharing on demand, reviewed in the next section, measured the total effects of cost sharing, without regard to whether that demand was patient or physician initiated.

Related to this is the potential effect of cost sharing on the medical care market. Cost sharing should induce patients to shop for the least expensive providers who can deliver services of acceptable quality at minimum cost. When patients shop for the least costly providers, competitive market pressures are generated among

² Douglas Conrad and Theodore R. Marmor, "Patient Cost Sharing," in Judith Feder et al. (eds.), *National Health Insurance: Conflicting Goals and Policy Choices* (Urban Institute, 1980).

them. The lower cost, presumably more efficient providers would attract more patients, while the higher cost, less efficient providers would lose patients. Market pressures would therefore force the high-cost providers to improve the efficiency with which they deliver medical services.

Finally, the high deductible incorporated in the HI program is intended to encourage patients to seek outpatient treatment instead of inpatient hospital care. It is also intended to deter unnecessary use of skilled nursing facilities. Because elderly people are more likely to suffer from chronic illness, there may be a tendency to admit elderly patients into skilled nursing facilities (SNF's) for custodial care. To reduce the inappropriate use of SNF, a 3-day hospitalization is required before a beneficiary becomes eligible for SNF benefits.

ARGUMENTS AGAINST COST SHARING

In response to these arguments in favor of cost sharing, critics have pointed out that cost sharing may well deter utilization, but in doing so, discourage patients from obtaining necessary services. The deterrent effects on utilization could adversely affect patients' health and reduce the quality of care they received. As a result of cost sharing, patients may delay treatment until an illness becomes so severe that the total cost of treatment is higher than it would have been if prompt treatment had been sought. Similarly, physicians may withhold necessary tests which would have correctly diagnosed the disease in time to treat it effectively.

Some argue that patients have insufficient knowledge to make rational calculations of the benefits and costs of their treatment choices. Moreover, patients seldom know in advance what treatment they will need and thus cannot determine its cost. Physicians, who presumably possess more information, are only indirectly affected by the price facing their patients. As a result, it is argued, cost sharing would not generate sufficient competitive pressure in the marketplace to promote efficiency.

Another major criticism of cost sharing relates to equity. A uniform deductible or coinsurance rate would place a greater burden on the poor than on high-income families. On the other hand, if the cost sharing is related to family income levels, program administration would become more complicated and costly.

Finally, the critics argue that in the presence of cost sharing, individuals will purchase supplementary insurance to reduce their out-of-pocket medical expenses. This could mitigate any effects on the demand for services that cost sharing may bring about. For medicare beneficiaries, private insurers have offered medigap policies. They are designed to cover the gaps in medicare coverage, such as the deductible and coinsurance amounts, and uncovered hospital days. Medigap policies have been purchased by a sizable proportion of medicare eligibles. This demonstrates that beneficiaries are risk-averse toward catastrophic expenditures and/or desire first dollar comprehensive insurance coverage.

REGULATING CONSUMER BEHAVIOR IN THE PRESENCE OF INSURANCE:
A REVIEW OF THE EMPIRICAL STUDIES

The availability of health insurance through medicare would be expected to increase beneficiaries' demand for medical services. Because medicare provides broad coverage of hospital care and physicians' services, participants in the program are made to feel better off for having this insurance policy. This results in two effects: So-called moral hazard, and a price effect. Moral hazard relates to specific behavioral responses to the incentive created by insurance coverage. Because of the availability of insurance, people may alter aspects of their lifestyles that will adversely affect their health, in the knowledge that they would be cared for if they become ill. For example, they may decide not to stop smoking or to lose weight, which they might have done if they or their families had been directly responsible for the financial consequences of associated illnesses.

Related to this, medicare causes medical care prices to seem lower than the actual value of the resources employed. This so-called price effect will also provide a motivation for medicare beneficiaries to obtain more services than they would if they had to pay the full cost. The price effect would not be very important if the consumption of medical services were determined only by medical need. The influence of economic factors, such as insurance coverage, on utilization levels has been well documented, however.³

A number of empirical studies have attempted to evaluate the quantitative effect of cost sharing on the utilization of health services. Doing so is normally difficult, due to the usual absence of a suitable control population. Among the researchers who have been able to identify an appropriate control group are Scitovsky and Snyder,⁴ Phelps and Newhouse,⁵ Enterline et al.,⁶ Beck,⁷ Roemer et al.,⁸ Scitovsky and McCall,⁹ and most recently, Newhouse, et al.¹⁰

The evidence strongly indicates that coinsurance significantly affects consumers' use of health services. The general conclusion has been that the more consumers must pay out of their own pockets, the fewer services—particularly outpatient physicians' services—they will demand. For example, Scitovsky and Snyder examined the utilization patterns of the subscribers to a medical plan before and after a 25-percent coinsurance provision was instituted. They

³ See, for example, C. E. Phelps and J. P. Newhouse, "Coinsurance, the Price of Time, and the Demand for Medical Services," *Review of Economics and Statistics* 56:384-42, (1974).

⁴ A. A. Scitovsky and N. M. Snyder, "Effect of Coinsurance on Use of Physician Services," *Social Security Bulletin* 35:3-19 (1972).

⁵ C. E. Phelps and J. P. Newhouse, "Effects of Coinsurance: a Multivariate Analysis," *Social Security Bulletin* 35:20-9 (1972).

⁶ P. F. Enterline, v. Salter, A. D. McDonald, and J. C. McDonald, "The Distribution of Medical Services Before and After 'Free' Medical Care—The Quebec Experience," *New England Journal of Medicine* 289:1174-8 (1973).

⁷ R. G. Deck, "The Effects of Co-Payment on the Poor," *Journal of Human Resources* 9:129-42 (1974).

⁸ M. I. Roemer, C. E. Hopkins, L. Carr, and F. Gartside, "Copayments for Ambulatory Care: Penny-Wise and Pound-Foolish," *Medical Care* 13:457-66 (1975).

⁹ A. A. Scitovsky and N. McCall, "Coinsurance and the Demand for Physician Services: Four Years Later," *Social Security Bulletin* 40:19-27 (1977).

¹⁰ J. P. Newhouse, W. G. Manning, C. N. Morris, L. L. Orr, et al. "Some Interim Results from a Controlled Trial of Cost Sharing in Health Insurance," *New England Journal of Medicine* 305:1501-7 (1981).

determined that physician services per subscriber fell by 24 percent after the coinsurance provisions took effect. Phelps and Newhouse analyzed the same data and concluded that the decline in physician visits amounted to 1.37 per person per year after other subscriber characteristics had been taken into account. In a followup study, Scitovsky and McCall determined that the lower use rates registered soon after the coinsurance took effect were maintained during subsequent years, indicating that the earlier changes had not been a short-term phenomenon.

Several other studies have assessed the effects of changes in the cost sharing provisions of Government medical care programs. Two of these studies are Canadian. Enterline et al. studied the effects of providing free medical care in the Province of Quebec, which was begun in 1970. They found that per capita physician visits remained constant, but that the distribution of persons receiving services shifted markedly to lower income groups. Accompanying these shifts was an increase in the percentage of selected conditions for which people consulted a doctor, a near doubling of the waiting time for a doctor's appointment, and an increase in waiting time in the doctor's office. Beck evaluated the introduction of copayment in Saskatchewan in 1968, as it affected poor families. He found that the copayments of \$1.50 for physician office visits and \$2 for home, emergency, and hospital outpatient visits reduced the use of physicians' services by the poor by 18 percent. This was substantially greater than the estimated 6-7-percent reduction by the general population, although the author could not determine for either group how much of the reductions was attributable to declines in unnecessary care. Finally, Roemer, et al. examined the effects of a copayment experiment involving medicaid beneficiaries in California. They found that, at first, utilization of ambulatory physician visits declined when copayments were introduced. Later, however, hospitalization rates rose, which they interpreted as evidence of neglect of early medical care resulting from the institution of copayments.

The most recent, and most generalizable, research on the subject of copayments is that reported by Newhouse et al. from the Rand study. Data for this assessment were drawn from a randomized controlled trial of alternative health insurance coverages. The coverages varied widely in their coinsurance provisions, which ranged from no coinsurance—that is, free care—to 95-percent coinsurance. The latter type of coverage resembled a catastrophic health insurance policy. Coinsurance provisions were coupled with limits on the total expenditures for which a family would be liable. The limits were generally related to family income.

A number of important findings grew out of the Newhouse et al. study. Overall, the authors found that per capita expenditures for inpatient and ambulatory services rose steadily as coinsurance decreased. Persons receiving free care incurred expenditures that were about 60 percent higher than those for people with catastrophic coverage. Newhouse et al. found no evidence to support the Roemer et al. conclusion that high-deductible plans are ultimately more costly because they encourage neglect of illnesses and consequently result in higher hospitalization rates. In fact, they found that the probability of hospitalization was highest for per-

sons receiving free care. Finally, they concluded that the poor were not disproportionately affected by cost sharing, though they would have been had the cost sharing not been related to family income.

In a recent article, Brook et al.¹¹ reported the impacts of cost sharing on adults health observed in the Rand study. Adults age 14-61 who were free of disability that precluded work who had been randomly assigned to pay a share of their medical expenses used approximately one-third less physician and hospital services than those who received free care. For persons with poor vision and for low-income persons with high blood pressure, free care brought on improvement in health status. For the average participant in the Rand study, no significant effects were detected on eight measures of health status. These observations may have limited applicability to the medicare population because they were made on relatively healthy adults under the age of 65. Also the observations were based on a limited number of measures for health.

The empirical literature, as we have noted, supports a definitive conclusion that the more medical care is covered by insurance, the more services will be used and, conversely, the greater the proportion of costs patients must assume, the fewer services they will seek. These patterns appear to apply to ambulatory care—and especially to physician visits—more than hospitalization, though the two are related. What is still not clear is the interpretation of the patterns observed. Consequently, the longstanding question thus still remains unanswered: Is there too much use with full coverage, or too little with high coinsurance rates? The evidence that is available suggests that both may be true to some extent.

PROBLEMS WITH THE CURRENT MEDICARE COST SHARING PROVISIONS

As we have noted, there are a number of strong arguments for incorporating cost-sharing provisions into insurance programs. Medicare's experience, however, has demonstrated that the behavioral responses of both beneficiaries and providers can largely offset the intended benefits of cost sharing. Such responses can now be seen as a result of the faulty design of the medicare benefit structure and of the market imperfections that were not well understood in the mid-1960's, when medicare was enacted.

A major flaw of medicare's benefit structure is that it violates the primary purpose of insurance: To protect the beneficiary from financial ruin. The cost-sharing provisions of HI and SMI leave beneficiaries to face unlimited liabilities in the event of catastrophic illness. Under HI, patients are required to pay the full hospital cost after 150 days of hospitalization, after they have already paid high cost sharing amounts beginning on the 91st day. In addition, SMI requires patients to pay 20 percent of reasonable charges for physician visits and other outpatient services. For expensive surgery, the 20 percent cost sharing requirement could represent a significant drain on a patient's financial resources. Consequently, the risk of substantial financial loss, however small it might be, would

¹¹ This article, Brook et al. "Does Free Care Improve Adults' Health? Results from a Randomized Controlled Trial" *New England Journal of Medicine*, vol. 309:1426-1434 (Dec. 8, 1983), was published after the Conference on the Future of Medicine. We included it because of its relevance to our paper.

encourage beneficiaries to buy supplementary insurance coverage. This flaw in medicare's benefit structure helped to create the demand for medigap insurance.

Medigap, as mentioned earlier, is the supplementary insurance sold by private insurers to finance the cost sharing under HI and SMI. Two-thirds of medicare beneficiaries have voluntarily purchased this coverage.¹² Medigap premium rates are high. For example, the 1983 premium rate in Massachusetts is \$412.¹³ By assuming financial responsibility for cost sharing amounts, medigap works to offset the cost-consciousness that medicare's cost sharing provisions were intended to encourage. Medicare benefits, therefore, must be restructured before the cost-sharing provisions will function in the manner intended.

A second major flaw in the medicare cost-sharing provisions is that they were designed under the assumption that beneficiaries will have adequate information about the relative cost of services rendered by different providers as well as the alternative modes of care that would be available in treating an illness. The reality, however, is that patients lack adequate information about the fees charged by physicians and prices charged by hospitals. Such information is not readily available. More importantly, it is usually the physician who makes the decisions about what tests should be done, what procedures should be performed, and where the patient should be hospitalized. While the patient normally makes the initial selection of a physician and decides when to consult him, subsequent decisions are mostly made by the physician acting as the patient's agent. Both patients and physicians lack comparative information about the cost of tests, medical procedures and hospital care as well as their effectiveness. As a result, even when cost-sharing is paid directly by the patient (that is, unsupplemented by private insurance), neither the patient nor the physician may be able to invest the resources required to obtain the data necessary to make well-informed choices.

PRICE VARIATION AMONG PROVIDERS OF SERVICE

Within the same market area, there is substantial variation in the prices charged by hospitals and physicians for what appear to be the same services. There are many reasons for these charge differences. Some result from real product differences that may lead to different health outcomes. Others result from differences in amenities or other factors that affect the cost of the service but may not influence the outcome.

Some differences in charges arise because of the differences in technical competence among providers. For example, a cardiovascular surgeon with a high success rate in performing coronary artery bypass surgery is likely to charge more than another surgeon who has a lower success rate. The more successful surgeon can charge higher prices because more patients are attracted to him or her by his reputation and by physician referrals. He or she can raise his prices and still maintain a satisfactory patient demand. In con-

¹² Congress of the United States, Congressional Budget Office. "Changing the Structure of Medicare Benefits: Issues and Options" (March 1983), p. 38.

¹³ Boston Globe, Aug. 31, 1983.

trast, a less successful surgeon may not be able to maintain a satisfactory patient demand if he raises his prices. Higher fees, however, are not necessarily associated with better medical care. Many less successful physicians are able to charge high fees because patients lack sufficient knowledge to evaluate doctors' technical capabilities. Moreover, patients and physicians alike find it difficult to obtain accurate information on physicians' charges. Often, the cost of obtaining information will be very high because the patient has to sample the services of a physician before he can obtain sufficient information about both his charges and his competence. Consequently, patients often base their selection of doctors on factors other than price.

Other charge differences are due to the different amenities offered by providers, such as air-conditioned buildings, carpeted floors, and gourmet cooking. Some physicians may have higher costs because they have more attractive waiting rooms, more courteous secretaries, designer dressing gowns, well-located offices, and so forth. These differences will not necessarily affect the health conditions of patients, yet they will increase the satisfaction of patients when they get care.

Lastly, both hospitals and physicians have different production costs because of the variation in their managerial capabilities and in the scope of their activities. Management of health care institutions has not received close attention until recently. Some institutions are well-managed while others are operated very inefficiently, and these differences can produce wide variation in the cost of services provided. Other cost differences arise because of differences in the scope of activities performed. An important example concerns teaching and nonteaching hospitals. Apart from quality of care differences, costs may vary between the two groups because teaching hospitals are involved in education and research activities that are not performed in nonteaching facilities. Many of these activities benefit society at large, although they are financed primarily by patients (or by insurance plans on their behalf).

Examples of inter-provider price variation are shown on tables 1 and 2. Table 1 illustrates the allowed charges for selected diagnosis-related groups (DRG's) by hospitals within a single county in New Jersey. Comparisons of these data indicate that, for a given DRG, allowed rates could vary by approximately 100 percent. For example, the allowed charge for angina (medical) in the lowest cost hospital was \$1,960, and the highest cost hospital, \$3,646. Wide variation in hospital reimbursement rates are found for most procedures.

TABLE 1.—COMPARISON OF REIMBURSEMENT RATES FOR SELECTED DRG'S IN ESSEX COUNTY, N.J., 1981

[Amounts in dollars]

DRG category	Range of reimbursement		
	Low	Average	High
Vaginal delivery, without complications	1,114	1,411	2,004
Cesarean section, without complications or comorbidity	1,799	2,339	3,609
Angina, medical	1,960	2,641	3,646
Lens, surgical	1,201	1,504	2,180
Back disorder, medical	1,807	2,141	3,063
Gastrointestinal disorder, age 69 or less, with comorbidity	709	967	1,521

Source: Authors' tabulation of data provided by the New Jersey Department of Health. The DRG rates are partly based on each hospital's actual cost and partly on the State's average cost. Therefore, the differences in actual cost among hospitals are greater than the rates shown.

Still greater variation exists among physicians who practice in the same geographic area. Table 2 illustrates the differences in physicians' charges for three frequently performed procedures. These data reveal that charges can vary by more than 100 percent in the same geographical area for surgical services and by as much as 200 percent for medical services.

TABLE 2.—COMPARISON OF PHYSICIAN FEES FOR SELECTED PROCEDURES IN SEVERAL COMMUNITIES IN CALIFORNIA

[Amounts in dollars]

Procedures and communities	Low	High
1. Normal delivery:		
Alameda County, Calif.	500	950
Los Angeles, District No. 1	500	1,150
Los Angeles, District No. 10	500	950
San Francisco, Area No. 3	575	1,050
2. Hemorrhoidectomy, complete:		
Alameda County, Calif.	550	900
Los Angeles, District No. 1	450	1,050
Los Angeles, District No. 10	500	900
San Francisco, Area No. 3	500	950
3. Initial office visit—complete physical and history:		
Alameda County, Calif.	50	150
Los Angeles, District No. 1	50	130
Los Angeles, District No. 10	50	140
San Francisco, Area No. 3	50	150

Source: William C. Hsiao, "Patterns of Physicians' Charges: Implications for Policy." Proceedings of Conference on Regulating Health Care Costs. U.S. Health Care Financing Administration, Washington, D.C. September 1978. The 1971 fees are updated to 1982 prices.

The presence of such price variation and of so many reasons for cost differences raises an important public policy question: What charges are appropriate for a compulsory social insurance program, such as medicare, to pay? In our view, patients and physicians should continue to make choices about how best to obtain medical services. However, they should do so in light of vastly increased information and with enhanced incentives to make appropriate choices. Currently, as we have noted, there is little information and there are few incentives. In fact, given the flat deductible and coinsurance amounts required for hospital care, the current system encourages patients to use the most expensive hospitals. The challenge facing the designers of a benefit structure is to provide enhanced incentives for the appropriate use of services while at the same time maintaining the patient's financial access to care. As part of this process, it is imperative that medicare provide its beneficiaries with adequate information on which to base their choices, so that self-rationing results in outcomes that benefit consumers and the program alike.

PROPOSED REFORMS

Medicare's financial problems are complex. There are a number of underlying causes, including the flawed benefit structure, the open checkbooks provided to hospitals and physicians who can fill in any amount they want, and the legal and professional independence given to physicians in making medical decisions. As we continue to emphasize, no one solution can solve all of these problems. Stricter regulation of providers is one partial remedy. Raising taxes is another. Restructuring medicare benefits is yet another. Each of these remedies can address some part of medicare's financial difficulties, and can contribute to reducing the overall inflation in medical costs. No single remedy, of course, will be a panacea.

With respect to benefit restructuring, we believe that such a restructuring should take place to achieve several primary objectives. First, the altered benefit structure should provide financial protection to beneficiaries and access to the medical services they need but cannot afford. Second, the structure should be designed to encourage the efficient production of medical services and to reduce unnecessary medical care. Third, the benefits should be provided on an equitable basis. If patients have to share in the cost of medical care, they should do so according to their ability to pay. Fourth, benefits should be restructured to achieve savings in program outlays. Finally, the structure of medicare benefits should be designed to minimize the beneficiaries' need to supplement those benefits with private insurance.

The primary purpose of any insurance plan is to protect the insured from financial catastrophe. The current benefit structure, as we have noted, fails to serve this purpose when it leaves beneficiaries with unlimited liabilities. This flaw can be remedied by limiting the patient's share of medical costs. Equity considerations, however, necessitate that the limit be linked to beneficiaries' family income. In order to achieve Federal savings from an increase in cost sharing as well as an equitable distribution of the cost-sharing burden, we have developed a set of proposed revisions. The concep-

tual framework for those modifications is presented below. Specific rates and amounts are provided mainly for illustrative purposes.

Health insurance

Uniform deductibles and coinsurance would be replaced by amounts that would vary according to provider cost category, as described below. The 1-day deductible for hospital care would be retained, but it would be based directly on each hospital's actual charges. From days 2 through 60, coinsurance rates of zero, 10, or 20 percent of charges would be assessed, depending on the hospital's cost category. Similarly, for skilled nursing facilities, a 25-percent copayment would be required after 20 days of care, which again would be based upon the actual charges of each SNF.

Supplementary medical insurance

An annual deductible of \$100 per beneficiary would become effective January 1, 1984. The deductible amount would thereafter be indexed annually, according to the physician price index. Coinsurance rates would again be tied to the provider fee category. The coinsurance rate would be 10, 25, or 40 percent of charges exceeding the deductible, depending on the fee category of physician from whom the care was received.

Maximum limit on cost sharing

An income-related limit would be placed on each beneficiary's overall liability for the cost of covered services (HI and SMI combined). For those with family incomes below \$10,000 per year, the limit would be \$1,000. For those in the \$10,000 to \$20,000 income range, the limit would be \$2,000. For all others, the limit would rise to \$4,000.¹⁴

Prior to implementing these provisions, the Federal Government would classify hospitals and physicians into three broad categories. In each region (such as a health service area), hospitals would be grouped into high-, intermediate-, and low-cost facilities, based on the prior year's average cost for selected DRG's. The information needed to construct these categories is already being collected by hospitals and by the Government as part of the recently implemented DRG-based reimbursement system for hospitals. Patients would then pay a different coinsurance rate depending on the cost category of the hospital in which their care was received. These price comparisons of area hospitals should be widely disseminated to consumers and physicians.

Some patients may have to be hospitalized in higher cost facilities for sound medical reasons. Under our system, these patients would have to pay a higher coinsurance rate, but their liabilities would be limited by a ceiling. Other patients may choose to go to higher cost facilities for convenience, better amenities, or because a particular physician uses that facility. If they made that choice, however, they would have to pay more.

¹⁴In order to remove the "notch problem" for those with family incomes between \$10,000 and \$12,000 and \$20,000 to \$24,000, the maximum limit would rise above the \$1,000 and \$2,000 levels, respectively, by one dollar for every two dollar increase in family income. Also, these dollars should be indexed to the Consumer Price Index.

Our proposed system would provide consumers with an incentive to weigh the costs and benefits of selecting the higher versus lower cost hospitals. In the long run, the informed choices may be patients directly or through their physicians could exert significant market pressures on hospitals to economize. Prestige and sophistication would not be the sole criteria for patients and physicians in selecting a hospital, as they frequently are now. Cost and efficiency will also be considered. These decentralized market pressures could yield large dividends to the Nation in reducing waste, duplication and unnecessary services.

Our proposed plan would also require the Federal Government to classify physicians into three broad price categories: high, intermediate, and low. The amount of cost sharing would then vary according to the price category of physician from whom care is received. The criteria for the classification would be based on the fees charged for selected commonly performed procedures. The classification of physicians would again be done by service area, and the category to which each physician belongs would be widely disseminated to all consumers.

Our proposed modifications to the medicare benefit structure were designed to apply to patients and providers participating in the traditional fee-for-service system, as the vast majority do. We propose that different provisions apply to participants in alternative financing and delivery systems that aim to provide health care services in a more efficient and cost-effective manner, such as health maintenance organizations [HMO's]. Qualified providers would be exempted from the Government's categorization scheme, and beneficiaries who choose to enroll in such systems would be exempted from cost-sharing requirements. Such preferential treatment, we believe, is consistent with the overall objectives of program reform.

DISCUSSION

The proposed plan would insure medicare beneficiaries against financial ruin by limiting their liability. As we have discussed earlier, equity considerations require that cost-sharing provisions be related to the beneficiaries' ability to pay. Our plan proposes to establish income-related limits on each beneficiary's maximum liability, so that his out-of-pocket payments will never exceed a fixed amount. For example, a beneficiary whose family income is below \$10,000 would be required to pay up to, but no more than, \$1,000 in 1984. Current law places no ceiling on the amount he is required to pay. Under our scheme, the maximum limit would increase with family income, reaching a \$4,000 ceiling for those beneficiaries whose family income exceeds \$24,000. For those elderly people who are eligible for medicaid, required cost-sharing amounts will continue to be paid by medicaid.

Placing a ceiling on beneficiaries' liability would reduce the need for beneficiaries to purchase supplementary insurance. Medicare enrollees can budget for and set aside the amount of total liability in the event a serious illness occurs. By restoring patients' financial participation in the program, the reduction in the purchase of

supplementary insurance coverage would increase the cost consciousness of both patients and their physician agents.

The proposed income-related ceiling is consistent with the basic principles of a social insurance program. Beneficiaries will continue to be eligible for coverage under a universal rule. Covered medical services will remain uniform for every eligible person. Neither eligibility nor covered services would be income tested. While the expected value of benefits would vary according to family income under our scheme, that is wholly consistent with social insurance principles as well. Social insurance differs from private insurance because of its redistributive effects. Private insurance emphasizes individual equity while social insurance stresses social equity. Under the largest social insurance program, the social security cash benefit program, there is a considerable redistribution of income from high-income to low-income individuals. This is because the formula for determining the cash benefits weighs lower wages more heavily than higher wages.

Under the current HI program, all employed persons pay the same tax rate on their wages (up to a specified ceiling). Consequently, persons with high lifetime average wages have paid much more in taxes than those with low wages, yet all medicare beneficiaries are eligible to receive the same benefits. As a result, there is already a redistributive effect embedded in the current HI financing and benefit structure. Our proposed plan would increase the redistributive effects, but without altering the basic nature of a social insurance program.

When cost sharing is related to income and to the prices charged by providers, some administrative mechanism must be devised to obtain income data and to identify program versus beneficiary liability by classifying providers. These administrative procedures will, admittedly, complicate the administration of the medicare program. In this era of computerization, however, it is feasible to design a cost-effective system to administer our proposed plan. For example, income determination could be based on a simplified income statement which would include data on earned income, social security benefits, pensions, and unearned incomes. But these income statements would not have to be filed unless the beneficiary has exceeded (or expects to exceed) the ceiling for cost sharing. According to data from the Congressional Budget Office¹⁵ less than 10 percent of all beneficiaries would exceed that ceiling.

Critics of our proposal may argue that medicare currently reimburses hospitals based on standardized, regional DRG-specific rates that define the liabilities of the program. The DRG-based reimbursement system is also likely to promote efficiency in hospitals. As a result, they may argue, there is no need for establishing variable coinsurance rates for hospital services. We see the situation differently, however.

The DRG-based reimbursement system, which partially closes the open checkbook previously provided to hospitals, still allows hospitals to directly pass through their capital expenses, teaching and research costs into medicare reimbursement rates. As shown

¹⁵ Congress of the United States. Congressional Budget Office, "Changing the Structure of Medicare Benefits: Issues and Options" (March 1988) p. 51.

earlier in table 1, the DRG reimbursement rates in New Jersey can vary by 100 percent, mostly because of these direct passthroughs. Moreover, the DRG-based reimbursement system, a national program, is broad in scope. It tries to provide incentives for the average hospitals, but such a system cannot deal effectively with local variations. Variable coinsurance rates would supplement the DRG regulator strategy by reducing the patients's demand for care in higher cost hospitals. They would, therefore, provide greater incentives to economize. In addition, any reduced demand on the high-cost teaching hospitals would lessen the pressure on hospitals to become teaching facilities in order to achieve higher reimbursement rates and greater prestige. Of course, any shift in demand away from higher cost hospitals would also yield Federal savings.

The determination of the price categories into which each provider belongs would also be relatively straightforward, given that price data are already being collected from providers by the Federal Government. Providers would be notified in advance into which cost category they had been classified. Their billing systems will thus be able to determine easily which part of the bill will be reimbursed by medicare and which part must be paid by the patient. Patients would be supplied with the price category to which a provider belongs and would thus know in advance the financial consequences of their choices (i.e., the percentage of charges for which they will be liable). When a beneficiary's direct payments have exceeded his maximum liability ceiling, the Government can issue a card to the patient indicating that, thereafter, the provider can bill medicare directly for all subsequent allowed charges.

As a consequence of providing full insurance for catastrophic illnesses, the medical resources spent on them may increase. It is likely that more patients would be hospitalized and given treatments that have questionable marginal benefits. These serious potential side effects of fully insuring catastrophic illnesses will have to be addressed through regulations and peer review. But since approximately 80 percent of the medicare beneficiaries have supplementary coverage now through medigap or medicaid (most of which provide comprehensive coverage), our proposed plan is unlikely to increase significantly the amount of resources currently devoted to catastrophic illness.

WHO GAINS AND WHO LOSES

Our proposed plan would directly affect medicare beneficiaries as well as the Federal and State governments, and it will indirectly affect hospitals, skilled nursing facilities, physicians, and taxpayers. The changes in the benefit structure would shift the cost burden among beneficiaries, and between taxpayers and beneficiaries. Also, the restructuring of benefits would influence the demand for services among providers and the rate of inflation in medical care costs.

The proposed plan would result in a reduction in Federal outlays for medicare. Preliminary estimates of the Federal savings are presented below:

TABLE 3.—PRELIMINARY ESTIMATES OF REDUCTIONS IN FEDERAL OUTLAYS FROM THE PROPOSED PLAN

[In billions of dollars]

	1985	1986	1987
Hospital coinsurance change.....	2.3	2.6	2.8
SMI deductible increase.....	.5	.8	1.1
SMI coinsurance change.....	1.3	1.6	1.9
Ceiling on total cost sharing.....	-2.1	-2.4	-2.7
Total.....	2.0	2.6	3.1

Source: These estimates are based on the figures published by the Congress of the United States, Congressional Budget Office, "Changing the Structure of Medicare Benefits: Issues and Options." (March 1983). Authors extrapolated the CBO estimates to the benefit provisions included in our proposed plan.

It is important to note that these estimates assume no behavioral changes by the beneficiaries in demanding medical services nor changes by providers to operate more efficiently. These figures only represent the shift in medical costs between the Federal Government and other payors. In other words, these estimates understate the potential Federal savings and overstate the additional costs to beneficiaries, because the efficiency gains that may result from the restructuring of benefits are excluded from those estimates.

In the long run, we would expect behavioral changes by beneficiaries in demanding medical services, and we would expect some providers to respond to competition by controlling their production costs or accepting a lower income. The savings resulting from these behavioral changes will take time to achieve and their magnitude is uncertain. We therefore do not wish to provide unreliable estimates of these potential savings. Nevertheless, we think it is plausible that the longrun savings in outlays for medical care because of the restructuring of medicare benefits could largely offset the increases in cost sharing that beneficiaries would have to pay in the near term.

The reductions in annual Federal outlays (shown in table 3) will in large part be assumed by medicare beneficiaries. States will pay a small part through the medicaid program. The increases for beneficiaries, on average, will amount to approximately \$80 per person in fiscal year 1985, \$100 in 1986, and \$120 in 1987. These financial burdens, however, will not be shared equally by all beneficiaries. Those with large medical expenditures would actually pay less than these average figures, also some beneficiaries would pay less than under present law. Those with small medical expenditures would pay more.

Beneficiaries with high expenditures will pay less under our plan because it provides protection against catastrophic medical expenses. The estimated cost of this coverage is also shown in table 3. The cost of this income-related catastrophic protection plan will offset a large portion of the Federal savings produced by raising coinsurance on hospitalization and physician services. The 7 to 10 percent of beneficiaries whose medical expenditures exceed the ceiling will benefit from this coverage, as their out-of-pocket medi-

cal payments will decrease significantly. Meanwhile, those beneficiaries who have short stays in hospitals may pay more because of the imposition of coinsurance. But those beneficiaries who obtain services from low-cost hospitals would pay zero coinsurance. Those patients who use physician services will pay slightly more because their deductible would be raised from \$75 to \$100, and the coinsurance rate associated with using high-price physicians would be increased beyond the current 20 percent. Some of these increased outlays, however, may be offset by reductions in expenditures for medigap policies.

Medicare eligibles who obtain services from low-cost physicians or hospitals would gain because their coinsurance rates would be less than those under the present law. When beneficiaries use low-cost hospitals, there is no coinsurance for all hospital days. When beneficiaries use low-price physicians, their coinsurance rate is reduced from 20 percent as under the present law to 10 percent.

Another redistributive effect would occur in addition to the income transfer between beneficiaries who incur large medical expenses and those who incur small amounts. Our proposed income-related ceiling on patients' liability would benefit low-income beneficiaries much more than those with high income. Table 4 presents the distribution of the aged population according to family income. Currently, those with incomes \$5,000 or less are likely to be covered by medicaid as well as medicare. They would continue to have dual coverage under our proposed plan and would thus not be affected. Those with incomes between \$5,000 and \$10,000 would have a ceiling on direct payments of \$1,000, which would increase to \$4,000 for those with family incomes of \$24,000 or more. Beneficiaries with incomes greater than \$24,000 are unlikely to benefit from the ceiling, since, according to Congressional Budget Office estimates, less than 3 percent of the aged population will have out-of-pocket expenses that exceed \$4,000.

TABLE 4.—DISTRIBUTION OF FAMILY INCOME AMONG NONINSTITUTIONALIZED ELDERLY
[In 1984 dollars]

Family income category:	Percentage of beneficiaries
\$5,000 or less.....	12.6
\$5,001 to \$10,000.....	22.0
\$10,001 to \$15,000.....	19.4
\$15,001 to \$20,000.....	11.9
\$20,001 to \$30,000.....	14.7
\$30,001 and above.....	19.4

Source: Congress of the United States, Congressional Budget Office, "Changing the Structure of Medicare Benefits: Issues and Options" (March 1983), p. 22.

All medicare beneficiaries, however, will be protected from medical expenses that are catastrophic in relation to their ability to pay them. Even those beneficiaries who do not incur large medical ex-

penses would have peace of mind and the assurance that if they were to develop a serious illness, they would not face serious financial hardship.

The gains and losses among medical providers will also be uneven. In the long run, the hospitals with high costs are likely to lose patients, and those with low costs are likely to gain patients. The same shift in demand is likely to occur among physicians: Those with high charges, on average, are likely to lose some patients, while those physicians who charge less than the average price in a given service area would gain patients. These shifts in demand would result from the variable coinsurance rates incorporated in our proposed plan.

CONCLUSION

Cost sharing represents a mechanism to serve two purposes: To deter excessive utilization of medical services by providing incentives for patients and physicians to use resources more appropriately, and to reduce an insurance program's outlays. These justifications were among several that underlay the current medicare cost-sharing provisions as well as our proposed plan. Current medicare law imposes uniform flat-rate deductibles and coinsurance for both inpatient and outpatient services.

We believe that the existing provisions are seriously flawed. As medicare is currently structured, there is little incentive, or basis, for most patients and physicians to shop around for lower cost providers or to evaluate the need for proposed treatment procedures. Yet, in the event of serious illness, beneficiaries have no protection against financial ruin, because there is no limit on what patients may have to pay directly.

We have developed a set of proposed modifications of medicare's benefit structure. As in the current system, we would retain deductibles for hospital care and outpatient services, to deter unnecessary hospitalization and to reduce administrative costs. We would also retain coinsurance, but would restructure both the rates and the timing. Coinsurance rates would be linked directly to actual provider charges with higher rates associated with higher cost providers. Coinsurance would be required for all services used, including hospital care. However, the total amount of cost sharing paid by each beneficiary would be limited to a maximum amount that is related to family income. This represents a significant departure from the current system. Finally, a key component of our proposed plan involves the dissemination of comparative provider charge (price) information that is not currently available to either patients, or physicians.

Our proposed modifications of the medicare benefit structure address what we consider to be the major design flaws of the current system. At the same time, we believe they should be considered as one approach to reducing the anticipated deficit in the medicare trust funds. As we noted at the outset, however, this benefit restructuring should be viewed as one component of a multifaceted solution to medicare's financial problems. We have estimated that our proposed plan for benefit restructuring will result in savings of \$3.1 billion in 1987; while substantial, these savings by themselves

will not offset program deficits in the long term. Moreover, we would not advocate, as a matter of principle, that beneficiaries should assume sole responsibility for restoring medicare's financial health. That responsibility is one that should be shared by beneficiaries, providers, and taxpayers—future beneficiaries—alike.

THE REFORM OF MEDICARE: A PLEA FOR CAUTION

(By ELI GINZBERG, *Columbia University*)

A BACKWARD GLANCE

As with every issue which is on its agenda, Congress can consider the reform of medicare from a narrow or a broad perspective and can respond through modest or far-reaching action.

In addition to the obvious fact that medicare will face a financial crisis in the years ahead, it has other serious shortcomings: It does not provide insurance for catastrophic illness; long-term care, a major need of the frail and sick elderly, is not covered; the proportion of the health care costs of the elderly that medicare covers has declined since the beginning of the program to a point where it accounts for less than half of their total outlays for medical care. About two-thirds of all medicare beneficiaries buy medigap insurance to protect themselves against the high deductible items and other forms of cost-sharing mandated by medicare. Medigap, which has a high-loading cost, probably contributes to the overuse of scarce resources by discouraging patients and their physicians from pursuing less costly but efficacious forms of treatment. And until the recent introductions of TEFRA and DRG, medicare's reimbursement policies surely contributed to steep acceleration of hospital costs.

In light of the foregoing catena of shortcomings, the approaching financial crisis might be viewed by Congress as an opportunity to undertake a radical restructuring not only of medicare but of our total health care system. I am convinced that such an effort would be misguided and would surely fail.

Let me briefly explain why I have reached this conclusion and why I believe that Congress would be well advised to focus largely, perhaps exclusively, on the one problem that it must address, the prospective large deficit in the medicare trust fund, at the same time that it seeks to reduce general fund support for SMI. The following brief review is a reminder of earlier efforts to improve and reform medicare.

Since 1972, there have been repeated Federal legislative and administrative actions aimed at slowing the rise in hospital costs, the key element in medicare expenditures, accounting for about 70 percent of its total outlays. There is only one way to read this record. We have had little success in containing the rise in costs. The most that can be said for more than a decade's efforts is that, without them, the increases would have been still greater. We are just starting on a new, much more radical, effort, the DRG approach. The better part of wisdom would be to give this initiative a chance

to show what it can do. DRG may not work and it surely won't work without adjustments down the road as the full import and impact of prospective care reimbursement are revealed. But if Congress, in responding to the looming financial crisis facing medicare, were to introduce additional changes, it would almost certainly doom the DRG system before it has a chance to demonstrate its potential for reducing the rate of hospital cost increases.

It is a decade since Congress decided to make Federal funding available to accelerate the growth of HMO's in the hope and expectation that they would be able to contain health care costs. However the rules and regulations were drawn so tight that growth was inhibited; even after the regulations were relaxed, HMO's have grown relatively slowly and with regard to enrolling medicare beneficiaries on a prepayment basis, the record of the HMO's to date is close to nil. HMO's are simply not able or willing to risk adverse selection.

During the last decade, there has been a proliferation of alternative health care delivery systems and the years ahead will see many more but it would be an error to exaggerate the speed with which the extant system of fee-for-service medicine, private sector Blue Cross-Blue Shield and commercial insurance, the increasing technological sophistication of nonprofit acute hospitals, and the academic health centers are changing or will change.

More than 6 years ago Alain Enthoven first recommended to the Secretary of HEW that the basic structure of the U.S. medical care system be altered through greater reliance on the "competitive market." His was the most far-reaching proposal advanced to change the existing incentives which determine the behavior of both consumers and providers. He hoped to accomplish the following: To improve efficiency through more appropriate treatment modalities, to assure broad access to health care for the poor, to reduce Federal outlays, to provide insurance for catastrophic illness and much more. All of these benefits, he maintained, would be obtained at a considerably reduced total cost. His cogently written proposal had one major flaw: He did not explain how or why the key interest groups—physicians, academic health centers, trade union members, and the elderly—should embrace competition if their losses were certain, their gains problematic.

The foregoing abbreviated account suggests that it is much easier for analysts to outline on paper the design of a much improved health care system than for Congress to legislate the reforms to affect it. It is just possible that the extant medicare system, while far from perfect, has been performing reasonably well, which is all that one can expect in this imperfect world. It has brought the elderly into the mainstream of American medicine. Their access to health care has been much expanded. They are reasonably protected against high bills for acute hospitalization. They are being treated by physicians who, because of advances in knowledge and technology, can do more for them by adding to both the quality of their lives and their longevity.

Since the expenditures of the medicare program have risen much more rapidly than anticipated and the total costs for health care are now at 10.5 percent of GNP and continuing to rise, the Federal Government must shore up the medicare trust fund. This is the

principal challenge that Congress confronts. The public is not asking Congress to alter in any radical fashion the medicare system as it has evolved; it is even less interested in its restructuring the entire health care system. Although many are concerned about the steeply rising health care costs, there is no political consensus for major medicare or total health care reform.

THE HSAIO-KELLY PROPOSAL

In light of my reading of our experience with medicare, I will now comment briefly on Prof. William Hsaio's and Ms. Nancy L. Kelly's paper "Restructuring Medicare Benefits." I will also add some recommendations for Congress to consider in its forthcoming review of and response to medicare's approaching financial crisis. The Hsaio-Kelly paper is at once too ambitious and not ambitious enough. It deals with possible ways of helping to close the financial gap that looms ahead but its recommendations go only a small distance in this direction—a \$3 billion contribution toward closing the gap by 1987. At the same time the authors recommend the introduction of a major new benefit—catastrophic coverage. Further, they contend that their detailed proposal, if implemented, would lead to desirable changes in the actions of both beneficiaries and providers which would contribute to the more efficient use of health care resources which in turn would be reflected in lower costs.

It seems to me to be counter-indicated to recommend any new costly benefit such as catastrophic coverage at a time when the prospective trust fund deficit may approach or exceed \$300 billion by 1995. The issue of catastrophic insurance has been on and off the congressional agenda for many years but even when the financial situation of medicare and the Federal Government was much more favorable than at present, the key committees declined to mark up a bill. If they had reasons to hesitate in the late 1970's, they have much better reasons to delay in the mid-1980's. I agree with the authors that in theory any broad insurance plan agree should include catastrophic coverage. For better or worse, however, the American public has defined medical insurance as a system of protection not against financial ruin but rather freedom from having to pay out-of-pocket for large medical bills. Since the public has repeatedly demonstrated that it is not willing to copay more, to add coverage for catastrophic illness appears at this time to be ill advised.

Moreover, I question the emphasis which the authors place upon those facets of their proposal aimed at changing the behavior of both consumers and providers. If one starts with the premise that most Americans have an ongoing relationship with a physician whom they trust and whose advice they generally follow and further that they have coverage that protects them against large bills, there is little room for incentives based on price to come into play. Similarly, while long-term changes in the number of physicians can affect their fee schedules and how they practice, the established members of the profession have considerable scope at present and in the near and middle term to continue more or less in their accustomed ways. Over time the new entrants into the profession will

have to adjust to a more crowded market and will be under pressure to join an alternative delivery system or accept salaried positions. But one must not assume that if these shifts occur total costs will be constrained. I doubt it.

With regard to hospital care, patients follow their physicians' advice both as to admission and treatment. The DRG system looks to price competition to slow costs but whether it will succeed remains to be seen. Finally, alternative delivery systems, focused on price will have effect on the present system but it will be slow. I would give relatively little weight to the authors' anticipation of major efficiency gains; prices alone cannot alter fundamentally a market in which consumers pay out-of-pocket only about 30 percent of all charges and in the case of hospital care, less than 10 percent. Since most consumers have broad insurance coverage and since physicians are wedded to fee-for-service, price competition will not bring about significant efficiency gains. Only a radical restructuring of the entire system, such as Enthoven envisaged, which neither a Democratic nor Republican administration was willing to try, could provide the market test which the authors favor.

I do not believe that Congress should attempt to modify the medicare system by placing a sizable copayment on most patients who use hospitals between the 2d and the 60th day. That would be a major take-back from the elderly, half of whom have very modest incomes, no more than twice the poverty level.

My primary objections to the authors' proposal therefore are fourfold:

- It provides too little relief for the financial situation facing medicare;

- It offers a new and costly benefit, that for catastrophic illness;

- It suggests, mistakenly in my opinion, that there will be large efficiency gains that will moderate the rise in costs;

- It ignores the violation of the social contract by reducing substantially the benefits that medicare has provided beneficiaries up to the present.

I have a series of second-order objections which I will briefly note. I see no way of establishing and operating a threefold classification system of providers, physicians, and hospitals, based on their relative charges, and gearing copayments accordingly. The administrative and legal complications of shifting classifications in a rapidly changing marketplace would be horrendous and the realignments in patient-physician and physician-hospital relations would either not occur or if they did the ensuing costs would be very large. I consider it bad public policy to encourage patients to seek medical care according to unit price; the much more relevant considerations should be safety and long-term efficacy.

Further the authors slip when they provide a figure of \$120 as the average additional cost per beneficiary. Only one in five of the elderly is hospitalized in any one year and there is a high probability that those admitted will have a second hospitalization during the following year. Accordingly the potential costs should be calculated not in terms of all beneficiaries but for those who require

hospitalization. The costs to the latter would be many times the average figure for all beneficiaries.

Finally the authors assume that the preference for medigap policies would be reduced by the expansion of medicare coverage under their proposal to include protection against catastrophic costs. From what we have said earlier, I doubt that many beneficiaries would forgo this protection. In that event, the so-called behavioral changes aimed at cost containment on the part of the providers would be problematic.

I believe that the major contribution Hsaio-Kelly proposal is to alert the Congress to move with great circumspection before it decides to legislate any broad-based reforms for medicare.

A FEW MODEST SUGGESTIONS

Congress should focus its attention on finding new sources of income for the trust fund; my own preferences are for increasing the tax rate on HI, introducing a premium geared to income for beneficiary payments for SMI, and the increasing revenues through higher excise taxes on cigarettes and liquor and known carcinogenic substances. In addition, Congress should explore whether the following might over time make a lesser or greater contribution to slowing the rate of increase of health care costs without depriving beneficiaries of significant current benefits.

HMO's should be encouraged to accept medicare enrollees on a prepayment basis by enabling them to protect themselves against adverse selection factors through higher premiums based on the health status of potential enrollees. There is no need in my opinion to complicate this issue by tying it to a voluntary, and surely not to a mandatory, voucher system.

Since there is widespread agreement among knowledgeable persons that the rapid and continuing introduction of new technology has been a major contributor to a steady and steep rise in health care costs, an advisory commission under professional leadership might help to slow the acceptance of new costly procedures until they have demonstrated significant therapeutic value.

An early effort should be made to provide an alternative to the present passthrough of capital costs under the DRG system aimed at containing, and reducing, the Nation's acute bed capacity.

Too little is known about the 1 percent of all patients who account for 30 percent of all medical expenditures, up from 17 percent in the period just before the passage of medicare and medicaid. The presumption is that if we understood the reasons behind these very large expenditures, some alternative, less costly therapeutic approaches might be used.

One concluding comment: I do not believe that all of the foregoing, even if aggressively pursued, will prevent health care costs from continuing to increase as a percentage of GNP. But to interdict such a rise is not the challenge that Congress faces nor is it one that Congress has the capacity to resolve. The Federal Government accounts for over one-quarter of all health care expenditures, a significant proportion but not enough to leverage the system. At some point down the road the other major participants may become so unnerved by the continuing rise in total health care ex-

penditures that they may seek new Federal legislation aimed at restructuring the system. At that point Congress will be better positioned to act. Until that time, it should find a solution for the difficult but much less complex issue of keeping medicare financially viable.

A MEDICARE VOUCHER SYSTEM: WHAT CAN IT OFFER?

(By BERNARD FRIEDMAN, Ph.D., STEPHEN A. LATOUR, Ph.D., and EDWARD F. X. HUGHES M.D., M.P.H., *Center for Health Services and Policy Research, Northwestern University*)*

I. INTRODUCTION AND OVERVIEW OF ISSUES

The Congressional Budget Office has produced a vivid and inescapable analysis of the prospects for the medicare hospital insurance trust fund. The fundamental causes of future shortfalls are logically discussed, as well as the necessary size of some alternative corrective measures such as increased consumer cost sharing, decreased payment levels to hospitals, and increased taxes. That analysis, together with other CBO reports and the published articles by Paul Ginsburg and Marilyn Moon, are a most auspicious beginning for informed policy debate while there is still time for gradual solutions.

We leave to other authors the possibility of higher taxes. For methods not dependent on tax increases, the general economic problem is to control and reduce projected Federal outlays with the least decline in the expected welfare of beneficiaries. This leads to a consideration of inefficiencies under the present system involving (a) consumption of health care, (b) the supplementation of medicare with private insurance (65 percent of eligibles have supplementary coverage), and (c) medicaid.

There is general agreement that two leading devices for discouraging inefficient use of resources, and hence total cost shared by the Government and beneficiaries, are a higher consumer coinsurance for low- to moderate-sized charges and contracting with a group of providers who are at risk for the total cost of care delivered.

These two approaches to more efficient consumption can be encouraged side-by-side in a voucher system, allowing people to opt for alternative health plans (AHP's) and to share in any savings of total cost. There are also other advantages of a voucher system that should be emphasized. The purpose of this paper is to discuss systematically and, where possible, quantify the likely effects of a voucher system depending on its particular design elements.

In this introductory section we specify a prototype replacement (mandatory) voucher system that is a logical beginning for surveying critical issues and likely consequences. The issues become more complex in a voluntary system that preserves the option of current medicare entitlements. The second section of the paper analyzes in some detail the possible net gain from eliminating the medigap

*We are grateful to Paul Ginsburg of the Congressional Budget Office for advice on this effort. The research on medicare beneficiary preferences was supported by HCFA grant No. 18-P-97265. We also wish to thank Chris Hogan and Ajay Manrai for assistance.

market by means of a voucher system, even if this does not increase enrollment in cost-conscious AHP's. Such gains are more confidently expected in a mandatory system, but not altogether foregone in a voluntary system. We also develop the argument that some important benefits or options (e.g, long-term care) that are rarely supplied at present would become more practical to supply in a voucher system. Finally, we discuss implications of medicare vouchers for medicaid expense, and we suggest opportunities for efficient reforms in medicaid for the elderly.

The third section deals with expected consumer choices of plans in a voucher system, with special attention to (a) new evidence on the market appeal (to the elderly) of HMO-type plans, and (b) the extent of selection bias, especially the possible adverse selection, in a voluntary system, for the option of current entitlements. The concluding sections address issues of implementation of a voucher system, and summarize our reasons for favoring a substantial role for vouchers in the control of the Government's budget for medicare.

A. Prototype mandatory voucher system

There are several reasons to begin discussion of voucher with specification of a full replacement system of health insurances for the elderly. In this discussion, we presume that beneficiaries of the end stage renal disease program and beneficiaries who are institutionalized when they become eligible will be served by a continuation of current programs. Each medicare eligible, with the above exceptions would receive a voucher for a fixed sum of money to be applied to the purchase of an approved health insurance plan. This system assures that the cost of medicare to the Federal Government is predictable and controllable. Voucher values can be permitted to grow over time at some rate such as the rate of growth of trust fund income, or some price index.

The mandatory system, in contrast to current medicare or voluntary vouchers would no longer implicitly subsidize the purchase of medigap supplementary policies. The importance of this point was first noted by Ginsburg (1982), namely that with voluntary vouchers some people will find it attractive to retain current medicare entitlements with supplementary coverage that is implicitly subsidized (to a degree that we quantify later in the paper). The mandatory system assures that the people who select a plan with very low deductibles and coinsurance have paid the full marginal premium cost of these benefits compared to a lower benefit plan. This would tend to reduce the observed demand for such benefit levels, which themselves induce higher total utilization and current medicare expenses. Evidence on this point has been obtained in our own research below.

In addition to the above problem, current medigap policies, except for those covering people who continue to have employment-related group eligibility, tend to have high loading costs of selling, screening and administration built into their premiums. It is likely that the voucher system would reduce these costs by offering access to large groups of eligibles on a periodic open enrollment basis. The mandatory system, by eliminating medigap policies, would be more effective than voluntary vouchers in reducing loading costs.

Also, since the mandatory system eliminates the default option of current entitlements, it eliminates the possibility that people overestimate the value of current medicare coverage, particularly in the areas of long-term care and physician services. Recent Government brochures suggest that home health care is completely covered, and they give little information about how well the medicare part B definitions of reasonable charges will approximate the market prices of physicians.¹ Indeed, our research involving extensive interviews with medicare beneficiaries reveals that many are likely to overestimate medicare coverage for custodial care. We suspect, based on this research that because many people are more willing to trust the Federal Government than a private insurer, they therefore pay less attention to exclusions or limits in current medicare.

Other major elements of a voucher system include the determination of voucher values, the offering of cash rebates for less expensive plans, and minimum benefit requirements. A voucher system might determine voucher values on the basis of regional, national or mixed averages of past medicare expenses. The current program of entitlements supports widely varying average dollar benefits due to regional price and utilization differences.² While some regional variation could be justified on the grounds that wages (and therefore, contributions to the trust funds) vary in some correlation with medical care prices, the result can only be a crude approximation of equity in Federal benefit distribution. Under a mandatory voucher system, more precise targets of equity could be attempted (that is, vouchers need not fully incorporate variations in the intensity or style of medical care). By contrast, a voluntary voucher system must price vouchers regionally or else it will encourage AHP enrollment where prices are low and discourage them where prices are high—a quite perverse result!

The issue of whether to permit cash rebates for choice of plans with premiums below the voucher value arises in any voucher system. This is directly related to the issue of minimum benefits, since low benefits would generally be necessary to produce cash rebates. The availability of cash rebates in the prototype plan would seem to promote low-benefit plans especially for people with relatively low-cash income. Yet these are the same individuals who would quickly become entitled to medicaid if they had significant medical expenses. It might therefore be tempting to legislate minimum levels of coverage. However, this might unduly restrict the design of innovative plans. An alternative approach would simply be to require a catastrophic coverage provision (that is, a stop-loss at \$2,500, indexed to medical prices). One could still design a plan under this circumstance, however, that would have many exclusions and limitations on what expenditures would be eligible to apply to the out-of-pocket expense limit (e.g., hospital room and board expenses above a \$300 daily limit). We would therefore recommend that all AHP's be severely limited in what expenses could

¹ We refer to pamphlets issued from 1981 to date by the Health Care Financing Administration, cosponsored with the National Association of Insurance Commissioners, entitled "Guide to Health Insurance for People with Medicare."

² Karen Davis and Cathy Schoen, "Health and the War on Poverty," (Brookings Institution, 1978).

be excluded for calculation of catastrophic loss. An exception for HMO's seems proper, to exclude all covered services purchased from out-of-plan providers. This approach to minimum benefits should provide substantial flexibility for AHP's yet protect against problems of extreme misinterpretation or misrepresentation of policies, and partially address problems of low-income people purchasing minimal plans (more on the latter issue below). This approach should also permit a lesser investment in information by eligibles than would otherwise be prudent, and should reduce suspicion about plans offered at lower prices.

B. Precedents for the voucher approach

The designers of our current medicare program attempted to secure for retirees the same type of health insurance prevalent in the market for large employment-related groups. This approach is defensible for several reasons. The Government was proposing to tax people in their working years in order to supply them with a group policy in retirement that could not be purchased on such favorable terms by an individual retiree. Therefore, the revealed preference of large nonelderly groups was a useful approximation to consumer desires. Moreover, to depart from established patterns in third-party reimbursement could distort the relative supply of services to the elderly and nonelderly. The elderly were not to be treated as second-class patients.

A remarkable fact is that in 1960, 5 years before passage of medicare, the Federal Government had already initiated a voucher-type system of health insurance for Federal employees. This plan covers a group nearly half as large as the number of retired medicare beneficiaries. Why the FEHBP was not considered as a candidate model for medicare is something of a mystery. Since then, experience with individual choice within employment groups has grown to include roughly one-third of the population under 65, while being promoted by Federal legislation on HMO offerings. It would not now be correct to say that a voucher system would subject the elderly to being the "guinea pigs" of social policy.

Enthoven³ briefly describes the relative simplicity of the Federal role in FEHBP compared to medicare. The FEHBP has a periodic open enrollment season allowing people to switch between plans. It does not permit health screening and differential prices based on age and risk classification. Nor does it permit temporary exclusions of coverage for preexisting conditions. Neither of these types of devices, which are observed in the market for individual health insurance, have been necessary to the survival of high-benefit plans which are reported to retain 80 percent of total enrollment in the FEHBP.⁴ Hsaio⁵ compared the costs of administration for the FEHBP and medicare in 1971 and 1972. The cost per claim processed was estimated to be more than 25 percent higher for medicare than for the FEHBP. The medicare program was especially

³ Alain C. Enthoven, "Health Plan" (Addison-Wesley, 1980).

⁴ Jack Meyer, "Health Care Competition: Are Tax Incentives Enough?", in M. Olson, ed., "A New Approach to the Economics of Health Care," (American Enterprise Institute, 1981), pp. 422-447.

⁵ William Hsaio, "Public Versus Private Administration of Health Insurance: A Study in Relative Economic Efficiency," *Inquiry*, 15 (December 1978), p. 379.

higher in the functional areas of claims review and auditing, which Hsaio attributes to higher Government wages and complexity of medicare cost containment regulations.

In the private health insurance market today, there are important new types of contracts and self-insured employer plans. In addition to the group practice HMO's, there are newer plans which restrict choice of referrals to specialists and hospitals more than they restrict choice of primary care physician, or they may share the risk of profit and loss with primary care physicians who serve as gatekeepers, or they may apply indemnity limits to the coverage of some high-priced hospitals or physicians, and so forth. These are approaches that have plausible cost-containment incentives and appear to be easier for private firms to undertake than for the Federal Government which may be more vulnerable to complaints from well-organized providers about due process, discrimination, and interfering in the practice of medicine.

In areas such as higher education and housing, the Federal Government has found advantages in voucher-type systems rather than direct service supply or vendor payments. The housing allowance experiments (1970 HUD Act, title V, section 504) provide some recent experience relevant to a medicare voucher program. The basic experiment provided a cash payment to eligible families, living in units of minimum standard quality, equal to the reasonable market price of housing in excess of 25 percent of the family's income. Note that such a formula, taking into account family size and income, is analogous to an individually risk-rated voucher for health insurance.

One of the interesting results of the experiments reviewed by Aaron⁶ is that the incurred resource cost per \$100 of market value of additional housing consumed was only about \$110 in the voucher program compared to \$200 for low-rent public housing projects. It is believed that this difference is primarily due to the Davis-Bacon Act requirements for paying union scale rates of pay in federally supported construction projects. This is an example of the kind of constraint that can make a public enterprise more costly than competitive private suppliers. No precise analogy to medicare is intended, only reinforcement of the general point argued by Milton Friedman⁷ that the organized political representation of vendors is likely to be stronger than consumers or taxpayers, affecting the design of programs and rates of pay.

The housing allowances were vouchers with a cash rebate feature. In variants of the experiment where payment was not tied to minimum quality standards, two-thirds of recipients stayed in substandard housing and spent the money in other ways. Overall, Aaron reports that only from 9 percent to 27 percent of allowances went for spending on housing that would not have occurred otherwise. Moreover, the higher that quality standards were set, the lower the participation rate by the lowest income families. These findings bear on analogous concerns for medicare: One, a cash

⁶ Henry A. Aaron, "Policy Implications: A Progress Report" in K. Bradbury and A. Downs, eds., "Do Housing Allowances Work?" (Brookings Institution, 1981), pp. 67-69.

⁷ Milton Friedman, "Capitalism and Freedom," (University of Chicago Press, 1962), chas. 6 and 9.

rebate feature in medicare vouchers could be an undesirably strong influence on lower income persons to buy the lowest priced option and become candidates for other subsidized care in the event of large medical needs, and two, that as AHP benefit standards (and hence premiums) in a voluntary voucher system are set higher, the eligibles with lower income would become more likely to remain with the current coverage. The answer to these concerns, in addition to minimum catastrophic coverage requirements, appears to be some sort of income-related premium subsidy which could replace some of existing medicare expenses for the elderly.

The housing voucher program also sheds some light on the likely administrative costs of a medicare voucher program. Overall, 23 percent of program cost went for administration. While this seems fairly high, when compared to the 10-percent figure believed to apply to income transfer programs in general, it is important to realize that it includes major recruitment efforts, consumer advisory programs for finding and upgrading housing, and periodic reinspection and recertification of housing units. If the consumer recruitment and assistance programs are retained in the costs but the reinspection and recertification costs are eliminated (thereby better approximating costs of a health insurance voucher program), the administrative costs were only 12 percent of total program cost, using data reported by Zais.⁸ This is more comparable to other income transfer programs, and to the total administrative costs of FEHBP.

C. Loss of the medicare monopsony power

Since medicare pays for about one-third of all admissions to short-stay hospitals, few hospitals can refuse to accept medicare's definition of the allowable cost (or DRG price) it will pay for covered persons. In addition, a hospital cannot make any additional charge to the beneficiary for covered services. The extent to which medicare has exploited potential monopsony power to date is debatable, but this is becoming more of a reality with DRG's.

Actuarial consultants to DHHS have estimate that commercial insurers pay charges 25 percent higher than medicare, corresponding to a medicare discount of 20 percent, similar to Ginsburg's estimate.⁹ In some States, Blue Cross plans have contracts with payment rates comparable to medicare, particularly in the Northeast and North Central States where the Blue Cross market share is large. An interesting question is why commercial insurers can still compete with Blue Cross plans despite the discounts won by the latter. Medicare is only beginning to attack large differences in allowable cost between hospitals and growth from year to year that is substantially in excess of general price inflation. This is a very restrained monopsony. Also, medicare and Blue Cross can make credible claims that part of their discount simply recognizes savings to the hospital in administrative cost, working capital costs, and bad debts. Of course, some other insurers with smaller market

⁸ J. Zais, "Administering Housing Allowances," in R. Struyk and M. Bendick, eds., "Housing Vouchers for the Poor: Lessons from a National Experiment" (Urban Institute, 1981), pp. 200-220.

⁹ Paul B. Ginsburg, "Market-Oriented Options in Medicare and Medicaid," in J. Meyer, ed., "Market Reforms in Health Care," (American Enterprise Institute, 1983), pp. 103-118.

shares would like to have an opportunity to argue their case on the same criteria.

In a voucher system, unless elderly consumers are concentrated in a small number of plans, their insurers could probably not get as low a price from hospitals across the board. This disadvantage may be offset for those consumers choosing preferred provider plans. However, a cautionary note is that our evidence to be given in section III suggests that consumers are generally unwilling to have their choice of hospital very narrowly restricted despite meaningful assumed savings in premiums. Instead, many elderly buyers are interested in saving money with plans restricting choice of physician. If such plans reduce utilization of hospital care as much as the literature suggests, the purely financial net consequences of vouchers for many elderly may be positive. We should not expect choice of traditional plans with higher cost sharing to reduce demand for care so much that consumer payments go down.

One possible approach to retaining monopsony power for the elderly is to restrict the number of AHP's. This, however, is not congenial to the virtues of freedom of entry for AHP's offering new benefits (specific examples will follow in section II). An alternative is for the Government to require that participating insurers be charged by hospitals at the lowest price charged any private carrier. This would not attempt to preserve special treatment for the elderly, but would at least preserve for them the bargaining power of the largest purchaser. Such a regulation involves a value judgment about appropriate cross-subsidy among hospital users, and whether any monopsony advantages are ever fair.

Looking to the near future, one scenario is that the Federal Government might decide to reduce its real expenses by more severely reducing payment levels within the DRG framework. While this would leave elderly beneficiaries financially unaffected, service reductions should be anticipated. Why should a hospital continue to drive away its most profitable patients with higher prices or cut services to all patients because one payer class is lowering the price it will accept? And there is no way to prevent cuts in service to the elderly from going past the point that many would be getting less care than they would be willing to buy with extra direct payment. Currently physicians can collect these extra sums, as they are allowed to charge above the medicare limits. We are not arguing against the wisdom of provoking such a substitution of ambulatory for inpatient services, but it seems to us that this approach allows insufficient safety valves for high cost hospitals or high cost treatments that are valued by consumers.

D. Selection bias within a mandatory system

We cannot yet anticipate very accurately what types of plans would be offered in a voucher system or what kind of equilibrium could be established. There is a theoretical possibility that high-benefit plans could not survive despite the willingness of many people to pay the actuarial cost to insure themselves with such a plan. This conceivable problem, demonstrated by Rothschild & Stig-

litz,¹⁰ results from low-risk people being attracted away to low-benefit plans, raising the premium for high benefit plans until even the high-risk people are not willing to pay the price of the high-benefit plan. But when the high-risk people have moved down to the low-benefit plan, everyone is worse off.

How serious a problem is the consequence of self-selection likely to be? This is a priority research issue, as emphasized in the major literature review of Pauly and Langwell.¹¹ There are grounds for doubting that the practical problem is very large. High-benefit plans persist in the individual health insurance market and as options within employment-related groups.¹² The problem is also not pronounced in our research with medicare beneficiaries—see below.

Some degree of differential pricing at the individual level for known health problems may be necessary to assure the viability of traditional high-benefit plans. It is noteworthy that for individual health insurance, State regulators allow people to be charged differential premiums by age and by other risk classification devices. The pricing differentials might be negotiated between the Government and the final candidate suppliers of insurance. Alternatively, the threat that traditional high-benefit plans would be infeasible might be welcomed by many observers as favoring AHP's with better incentives for physicians to control total cost.

Luft¹³ warns that if adverse self-selection is feared by HMO's—for example, in the absence of differential risk pricing—even they may engage in several plausible strategies for attracting people with lower expected cost while discouraging others. He therefore recommends some uniform minimum standards on the scope of, and ready availability of, covered services in AHP's.

Within the FEHBP, the Blue Cross high-option plan still has a large plurality of enrollees. However, the cost has been dramatically diverging from the cost of prepaid HMO's within the FEHBP. Consider the spread between the cost of family coverage for Blue Cross and Kaiser of Southern California (a community-related plan). In 1970, the monthly spread was -\$6.03 (Kaiser was higher). By 1978, the spread was +\$4.92, growing to \$12.57 in 1982, and \$21.42 in 1983.¹⁴ Also consider HIP in New York which is experienced-rated to Federal employees. In 1978, this plan was \$14 per month less than Blue Cross for family coverage, growing to \$28.60 less in 1982 and \$39.63 in 1983. The growth of the excess cost of BCBS between 1978 and 1983, deflated by the CPI medical care component was 24 percent per year in the case of Kaiser, and 18 percent in the case of HIP. It may be the case that lower risk

¹⁰ Michael Rothschild and Joseph Stiglitz, "Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information," *Quarterly Journal of Economics*, 90 (November 1976), pp. 629-649.

¹¹ Mark V. Pauly and Kathryn Langwell, "Research on Competition in the Financing and Delivery of Health Services: Future Research Needs, NCHSR Research Proceedings Series (October 1982).

¹² Some observers note that employers are dropping former full-coverage health insurance plans, but this is believed to be due simply to the rapid growth of premiums independent of self-selection biases.

¹³ Harold S. Luft, "Health Maintenance Organizations and the Rationing of Medical Care," *Milbank Memorial Fund Quarterly/Health and Society*, 60, (1982), p. 268.

¹⁴ The 1-year increase from 1982-83 is reportedly an unusual cumulative adjustment to declining reserves.

people are deserting the Blue Cross plan; but, in many parts of the country, these individuals would not have to resort to inferior financial protection as in the theoretical discussions of this problem. If some people want to preserve free choice of provider with full coverage of expense, and if this preference makes a plan such as the Blue Cross high option extremely expensive, the result can be viewed as an inescapable tradeoff ("production frontier") between premium, coinsurance and restrictions on how different providers are covered—either significant coinsurance or restricted provider plans allow premiums to be kept near the fair value. This tradeoff seems to be one that is appropriately made by the individual consumer using a subjective calculus.

E. Special issues for a voluntary voucher system

Preserving the option of current service entitlements in a voluntary voucher program essentially guarantees that well-informed medicare eligibles suffer no decline in welfare as a result of a voucher system. This may be important for geographic areas where a relatively small elderly population would not permit meaningful diversity of options in a mandatory system. Also, a voluntary voucher system can be gradually implemented as more and more AHP's are admitted to the market. This process in fact is already underway. In March 1982, over 630,000 medicare eligibles were enrolled in prepaid plans, although five-sixths of these were enrolled in plans paid by HCFA on the basis of cost reports.

Drawbacks of the voluntary approach have already been noted above, such as the failure to eliminate the implicit subsidy of traditional medigap plans, and the high degree of regional indexing. Most fundamental, however, is the problem that the Government's total cost become directly sensitive to errors in the pricing of vouchers. If there is a favorable selection for an AHP and if Government voucher formulae overestimate how much benefits would have otherwise been paid on behalf of those who opt for the AHP, then the total cost to the Government will rise. This could be a chronic problem because people who expect higher than average expenses will find it advantageous to stay with current medicare coverage and a subsidized medigap policy.

Empirical evidence concerning the possible extent of this problem is given in two major studies by HCFA researchers.¹⁵ They analyze selection bias for four medicare demonstrations of AHP enrollment. In three of the four cases, enrollees in the AHP previously had substantially lower medicare benefit payments than those of comparable medicare eligibles in the same geographic areas. The Government's pricing formula, based on county, age, sex, institutional, and welfare status, was apparently 20 to 40 percent higher than justified by past experience of the enrollee group.

By contrast with Eggers & Prihoda, cost reports for these three AHP's suggest that each one was losing money on its at-risk medicare enrollment in 1980 and 1981, to the uniform extent of about

¹⁵ Paul Eggers, "Risk Differential Between Medicare Beneficiaries Enrolled and Not Enrolled in an HMO," *Health Care Financing Review*, 1 (winter 1980). Paul Eggers and R. Prihoda, "Pre-Enrollment Reimbursement Patterns of Medicare Beneficiaries Enrolled in At Risk HMO's," *Health Care Financing Review*, 4 (September 1982).

15 percent of revenue.¹⁶ The reasons for this conflict are not fully understood. The premiums necessary to cover unreimbursed cost may have been underestimated or purposely underpriced. However, it is surprising that the Kaiser plan with long experience with elderly enrollees—on a cost basis—would have suffered similar losses. One problem with the Eggers & Prihoda study is that they begin with a sample of people known to be alive in 1980 and proceed to look backward—hence the people who recently had died after using a great deal of service are omitted.

There is at least one conceivable strategy to preserve the option of existing service entitlements, while obtaining more of the efficiencies of a mandatory system. As an AHP succeeds in enrolling medicare eligibles, the total revenue it receives (from the Government and the enrollee) is valuable information. If this total price, less the amount that the beneficiary would have paid out of pocket in the current program, is below what medicare would pay currently, then the Government can raise premiums or cost sharing for the default option. The argument is that if an AHP proves its relative efficiency, the Government can share in the savings indirectly by this method until nearly all eligibles are induced to join more efficient plans. The burden is on eligibles to pay the revealed higher cost of open entitlements if they remain with the default option.

II. WELFARE GAINS IN THE PROTOTYPE SYSTEM

The prototype voucher system assures the Federal Government's budget objectives. The savings and improved predictability/control of the budget are not necessarily matched by a decline in the welfare of medicare eligibles if vouchers serve to eliminate sizable inefficiencies in health insurance coverage. This section considers two types of inefficiency that would be attacked by vouchers even if people do not select HMO's shown to have lower total cost associated with changed provider incentives. Then we discuss how vouchers might be used to improve upon the current means-tested medicare coverage for the elderly.

A. Elimination of the subsidy of medigap policies

Knowledge of the insurance coverage and expenses by source for the elderly has been enhanced by the National Medical Care Utilization and Expenditure Survey [NMCUES] of 1980. Tables from this source prepared by HCFA indicate that in 1980, some 65 percent of elderly, noninstitutionalized medicare beneficiaries held medigap policies with average annual benefit payments of \$395. Medicare paid \$988 per eligible person with medigap coverage, while paying only \$729 per person for the 21 percent of eligibles with only medicare coverage. Total expense was \$1,088 per person in the medicare-only group, compared to \$1,818 for those with medigap policies.

If we suppose that the only difference between these two groups was the medigap coverage, then medicare was subsidizing the pur-

¹⁶ Howard A. Kahn, and R. Leighton, "Summary of Observations, Medicare/HMO Demonstrations" U.S. Health Care Financing Administration report (March 1983).

chase of such coverage with \$259 of extra benefits. Let B be the medigap benefit, π be the premium and S be the extra medicare payment. Then π/B is the unsubsidized price of insurance—that is, the consumer price per dollar of expected benefit—while $\pi/(B+S)$ is the subsidized price. The rate of subsidy of medigap premiums can be seen to be $S/(B+S)$ which is a whopping 39 percent. Even if the loading of individual medigap premiums for administrative and sales cost is 50 percent, as indicated by the 1979 data presented by Carroll and Arnett,¹⁷ the net price of \$1 of benefits is now only 92 cents.

The initial calculations are possibly extreme, due to selection effects, even though medigap issuers are free to use medical screens and other restrictions. One indication of this extremity is that the 67-percent difference in total expense between the groups, associated with a 33-percent difference in net consumer cost-share, implies a price elasticity of demand for care of about 2.0 which seems too high. A more plausible price elasticity of about 1.25 can be estimated from the utilization differences reported by Link, Long and Settle, who controlled for many demographic and other determinants of the utilization of care.¹⁸ Using the lower demand elasticity, and interpolating both the B and S extreme values, we calculate a premium subsidy rate of 31 percent and a price $\pi=(1.03)(B+S)$ which represents a very low, albeit positive, load factor for a medicare eligible with typical prospective needs for health care.

Under the prototype voucher system, each individual faces the full cost of the benefits paid by the plan selected. The loading of premiums would be less than the 50 percent of current medigap plans, but greater than the 3-percent subsidized rate calculated above. This should reduce the demand for policies that primarily extend current medicare by eliminating deductibles and coinsurance. The 31-percent rate of subsidy is not much less than the estimated rate of tax subsidy of employer contributions of health insurance. Phelps¹⁹ and Feldstein and Friedman²⁰ have addressed the quantitative effects of that tax subsidy. The aggregate simulation by the latter authors (assuming price elasticity of demand for care near the levels found in the health insurance experiment) suggests that insurance benefits demanded are about 60 percent higher with the subsidy than without. Phelps's work suggests a somewhat higher conclusion. While the past research was for non-elderly populations, it helps to clarify the approximate size of the effects of the implicit subsidy of medigap policies.

Suppose, however, that the voucher system had no effect on the current combined coverage held by the 65 percent of eligibles with

¹⁷ Marjorie Smith Carroll and Ross H. Arnett III, "Private Health Insurance in 1978 and 1979: A Review of Coverage, Enrollment and Financial Experience," *Health Care Financing Review*, 8 (September 1981), p. 56.

¹⁸ Charles R. Link, Stephen Long, and Russell Settle, "Cost Sharing, Supplementary Insurance, and Health Services Utilization Among the Medicare Elderly" *Health Care Financing Review* 2 (Fall 1981), pp. 25-32. They found that the independent effect of medigap coverage on use of hospital days was +33 percent and for physician visits, about 40 percent. We used the higher figure overall to allow for the likely use of higher priced providers by people with medigap.

¹⁹ Charles E. Phelps, "Health Care Costs, the Consequences of Increased Cost Sharing," *Rand Corp. R-2970-RC* (November 1982).

²⁰ Martin Feldstein and Bernard Friedman, "Tax Subsidies, the Rational Demand for Insurance and the Health Care Crisis," *Journal of Public Economics*, 7 (April 1977), pp. 155-178.

medigap. They might still be better off financially by reduction of the loading costs they are paying in their medigap premiums. Let V be the voucher value determined by current average medicare payment per enrollee. This was \$1,005 in 1980 for the elderly in the NMCUES data. This is in fact higher than the \$988 average payment for those with medigap, due to the much higher Government cost for people eligible for medicaid. The lower figure is used here to understate results. Then the financial impact on medigap holders is favorable or adverse depending on whether

$$1.5B \geq (1+m)B + (m-t)V$$

Where m is the new load rate for all benefits, and t is the current loading rate for the purely insurance functions of medicare which we may assume to be rebated to consumers with the vouchers. The value of t for 1980, averaging over all medicare benefits is approximately 4.1 percent. Then the net effect is favorable, provided that m is less than 17 percent. This may be attainable in view of the fact that the load factor on average for insurers in the Federal Employee Health Benefits program is a bit less than 10 percent.

B. New coverage and options

Access to a large group of elderly persons able to afford AHP's may permit the supply of plans that are not feasible in the medigap market. We will develop this argument with respect to coverage of long term care [LTC] and then with regard to newer IPA models for physician and hospital coverage.

In the medigap market we observe contracts to fill-in the medicare part A copayment for care in participating skilled nursing facilities lasting up to 100 days. An extension of the period of 365 days, restricted again to skilled nursing care, is also available in many geographic areas. For more details based on our survey of LTC policy offerings, a report is available from the authors. The narrow approach of medicare and medigap policies to LTC is a recuperative philosophy of defining LTC benefits in terms of skilled nursing procedures at home or in approved facilities. Yet, our research, to be reported in section III below, and the reports of others indicate unsatisfied demand for the custodial components of LTC, especially at home, and willingness to pay substantial amounts for such coverage.

One reason that the supply of insurance for the large custodial component of LTC is virtually nonexistent may be that the cost of claims administration—determining when a person qualified and the least cost regimen of care—may be high and have a large fixed component independent of the number of policies sold. Moreover, the potential adverse selection may dictate high costs of personal selling and screening under present arrangements. Also, the restricted potential dollar volume per enrollee in the medigap market may not offer much incentive for consumer research and experimentation with new policy designs. The voucher system, by providing access to a large pool of persons at age 65 (which is still young in regard to the use of LTC) would permit insurers to realize

major economies of scale in spreading out the types of costs inherent in expanded LTC definitions.

A somewhat similar scale argument applies to offering of new types of cost-conscious plans. An insurer might undertake to enlist only those physicians who will accept stringent utilization review which is, itself, costly to set up. Or an insurer might develop an acceptable risk-sharing arrangement with primary care physicians for the costs of specialist referrals and hospitalizations. Such models are indeed emerging in private group health insurance. It is hard to imagine how such models could be offered in a medigap product. But some AHP's have been newly created within the past year in response to an invitation by HCFA for demonstration sites to enroll medicare eligibles. In short order, two dozen sponsors of AHP's, most of which are not group practice HMO's, were approved to enroll beneficiaries using a fixed formula of actuarially determined prices with unregulated profit or loss. This observation is encouraging about the prospects for more efficient plans that could be offered in a voucher system at attractive prices because of economies of scale.

C. Coordination and restructuring of medicaid

In 1982, about 7.5 percent of the elderly qualified for cash assistance on the basis of State and Federal income criteria and were automatically eligible for medicaid coverage that nearly completely eliminates their out-of-pocket cost for covered services. Another 5.5 percent of the elderly were eligible for medicaid because of large expenses after spending-down their income and assets. For 80 percent plus of these eligibles, State governments spent \$12.20 per person-month to pay the medicare part B premium. This can be a bargain for States wishing to provide generously for health care of the elderly; States save the Federal share of the expected cost of the covered part B services. Moreover, the elimination of consumer cost undoubtedly contributes to the NMCUES finding that medicare in 1980 spent \$1,800 per person on noninstitutionalized elderly covered by medicaid, compared to \$1,005 per elderly person overall. Beyond those expenses, in fiscal 1982 medicaid programs spent \$10.9 billion in vendor payments for 3.2 million elderly recipients of services. These are large commitments that would plausibly affect the behavior of the elderly with regard to the use of vouchers.

It is important to bear in mind the profile of elderly recipients and expenses by eligibility status. Table 1 below indicates that 58 percent of the recipients were those receiving cash assistance because of low-income levels; but because their expenses are relatively smaller, they account for only 25 percent of expenses. The second group is categorically eligible but not receiving cash assistance, typically because they are residing in a long-term care institution. The third group contains those whose expenses have been so large relative to their incomes that they qualify for assistance in those States that choose to include them. Over time, total recipients have been declining in the cash recipient group but rising in the other groups.

TABLE 1.—AGED RECIPIENTS OF MEDICAID, DETAILED BREAKDOWN BY BASIS OF ELIGIBILITY, FISCAL YEAR 1982

	Recipients (in thousands)	Payments (in millions)	Payment per recipient
Cash recipient.....	1,867	\$2,741	\$1,469
Eligible, no grant.....	627	3,530	5,630
Medically needy.....	747	4,582	6,134
Total.....	3,241	10,853	3,350

Table 2 shows that the pattern of expense by service category differs for the three eligibility groups. Expenses for the cash assistance group are relatively concentrated (19 percent—on hospital care as well as long term care—42 percent), while for the other groups, expenses are much more heavily concentrated on long-term care (87 percent and 78 percent). If the Federal share (about 55 percent) of all this medicaid expense were distributed across all elderly people, it would amount to \$256 per person, of which \$184 per person represents the expense on long term care.

TABLE 2.—PROPORTION OF TOTAL PAYMENTS FOR THE AGED SPENT ON SELECTED SERVICES, BY BASIS OF ELIGIBILITY

Service	Cash recipients		No grant		Medically needy	
	1975	1982	1975	1982	1975	1982
Hospital inpatient.....	0.10	0.19	0.04	0.02	0.03	0.10
Long-term care facilities.....	.56	.42	.84	.87	.84	.78
Physicians.....	.07	.06	.02	.01	.01	.01
Hospital outpatient.....	.01	.02	0	0	0	0
Drugs.....	.14	.12	.04	.05	.03	.03
Group total.....	.89	.81	.94	.95	.91	.92

Source: HCFA forms 2082, Office of Research.

Given the availability of this extensive assistance, (a) it is rational for the elderly who know they are eligible for assistance to keep to a minimum their expense on options within a medicare voucher system, (b) such persons will tend to pick plans with unrestricted choice of provider so long as medicaid has that feature, (c) people without sizable assets to protect can rationally plan to rely on medicaid for long term care. Another way of stating the last point about incentives is that the premium to increase coverage of long term care in a private contract may be greatly in excess of the value of being able to buy somewhat more or better care than medicaid will provide for free. A similar argument has been made regarding the effects of medicaid on inefficiently low demand for

catastrophic insurance clauses by people without a great amount of assets to protect.²¹

Based on those considerations, a corrective strategy in a voucher system is to cancel all automatic eligibility for medicaid for the elderly. Cash transfers can be increased permitting low-income elderly to afford plans with relatively comprehensive coverage. Then, any residual medicaid coverage would begin only after a much greater dollar loss out-of-pocket. Perhaps long term care coverage should be especially encouraged—that is, reinsurance guarantees—in the voucher system to increase the purchase of coverage and cancel the effect of medicaid entitlements.

III. CONSUMER PREFERENCES IN A VOUCHER SYSTEM

Studies of and market experience with consumer decisionmaking about health plans can provide important information about several issues pertaining to the development and outcomes of a medicare voucher program. They can provide information about (a) the extent of beneficiary knowledge about health insurance and hence the extent of difficulty that beneficiaries may have in making decisions about alternative plans, (b) the effects of plan features on beneficiary preference, thus assisting plan designers to develop plans that are maximally satisfying to medicare beneficiaries, (c) the types of plans that medicare beneficiaries are likely to choose given that plan sponsors are well-informed about their preferences and that a variety of plans conforming to those preferences are in fact offered to beneficiaries, (d) the percentage of medicare beneficiaries likely to choose AHPs with cost-saving financial incentives, (e) the degree of favorable self-selection for AHPs that must be anticipated in the pricing of voluntary vouchers, and (f) the degree to which selection bias, especially in a mandatory system, necessitates individually risk-rated vouchers. Previous studies of the choice of insurance plan, experience in the medigap market, the HCFA demonstrations and our recent research and medicare beneficiaries provide relevant evidence.

Formal studies of consumer decisionmaking about HMO's versus traditional insurance plans among the nonelderly population provide information about the effects of plan features on choice and the relationship between consumer characteristics and selection of plans. As discussed below, however, the retrospective nature of these studies and the limited number of plans examined in a given study create such serious problems of inference that findings pertaining to the effects of plan attributes in those studies are seriously suspect. Luft's review of HMO studies²² provides interesting information, however, about the relationship between consumer characteristics and choice of HMO's. He notes that a common finding of these studies is that "people having good ongoing relationships with physicians are unlikely to sever those ties for moderate savings." This might imply that those joining HMO's would be individ-

²¹ Bernard Friedman, "Rationales for Government Initiative in Catastrophic Health Insurance," in M. Pauly, ed., "National Health Insurance, What Now, What Later, What Never?" (American Enterprise Institute, 1979), pp. 85-103.

²² Harold S. Luft, "Health Maintenance Organizations, Dimensions of Performance" (John Wiley & Sons, 1981).

uals using fewer medical services since such individuals presumably have little need for ongoing relationships with physicians. This is also consistent with Luft's tentative conclusion from a few studies that people joining prepaid group practice HMO's were previously lower than average utilizers of hospital care under conventional coverage. However, he notes contrary evidence for people choosing the individual practice association HMO model.

Some aspects of the HCFA demonstrations of HMO enrollment have already been noted, but useful experience is only beginning to accumulate with the recent addition of two dozen new AHP's under the HCFA competition demonstrations. The experience at the established HCFA demonstration sites suggests that significant numbers of medicare beneficiaries are willing to enroll in AHP's. At the present time 14 percent of medicare beneficiaries have enrolled in various types of HMO's in the Minneapolis/St. Paul area, although only 7 percent of medicare beneficiaries have enrolled at the other three established sites (this may be due to the greater variety of plans in the Minneapolis/St. Paul area, thus making it possible for more medicare beneficiaries to find a desirable alternative plan). The HCFA demonstrations also provide evidence concerning selection issues. As noted previously, three of four existing "at risk" group practice HMO's may have obtained a somewhat favorable selection.

Finally, there is some suggestion from the study of enrollment practices in these demonstrations that medicare beneficiaries solicited and enrolled by mail for the Kaiser plan in Portland may not have understood the provider restrictions present in that plan.

Our own recent work is discussed in some detail below because it is closely targeted to answer the questions for medicare, and it avoids the limitations of the retrospective studies of consumer choice previously conducted. A thorough report of results and a discussion of the external validity of the methodology used in our research is available.²³

A. Conceptual approach to study of beneficiary choices

We start with the assumption common to economic and psychological models of choice that a consumer attempts to select a combination of health plan attributes which has maximum utility for that individual. In those studies of HMO choice that have included plan attributes as determinants of choice, the treatment of attribute preferences has typically been superficial. For example, most studies simply list the percentages of persons expressing a particular concern about a plan or reason for choosing a plan based on some attribute. See, for example, Scitovsky, McCall and Benham²⁴ for an example of a study in which it was found that a variety of attributes mattered to consumers but no attempt was made to determine relative importance.

Even more serious limitations of previous research methodologies are (1) the likely distortion in estimates of the determinants of con-

²³Stephen A. LaTour, Bernard Friedman and Edward F. X. Hughes, "The Vouchering of Medicare: A Marketing Research Approach," Center for Health Services and Policy Research, Northwestern University, 1983.

²⁴Ann A. Scitovsky, Nelda McCall, and Lee Benham, "Factors Affecting the Choice Between Two Prepaid Plans," *Medical Care*, 16 (1978), pp. 660-681.

sumer preferences due to use of a retrospective methodology, and (2) the small number of plans available in any one study for estimation of attribute effects. Asking respondents to explain their behavior after the fact has long been viewed as inappropriate by psychologists study decisionmaking. Memory error is heightened with the passage of time and there is also the serious problem of ex post rationalization.²⁵ The small number of plans in previous studies means that there is a serious confounding of attributes. For example, a closed panel HMO may differ from a traditional plan on numerous dimensions: Price, deductible amount, copayment amount, restrictions on physicians, restrictions on hospitals, et cetera. Making an inference as to which attributes influence choice is impossible when the number of attributes far outnumber the number of plans.

A procedure that eliminates the problems of recall inaccuracy, retrospective distortion, and confounding of plan attributes involves presenting individuals with a set of hypothetical health care plans structured according to experimental design criteria. The respondent then rates the plans on an appropriate scale, such as preference or purchase intention. Evidence for the validity of prospective approaches has been provided by several authors.²⁶ They show that such methods can predict actual choices of products and even complex services in the marketplace with a relatively high degree of accuracy.

One final point should be made with respect to purchase intention models. In general, concomitant variables (consumer characteristics) can be assumed to alter an individual's preference for various attributes. For example, it is supposed by many that higher income leads to reduced demand for low deductibles. The analysis of covariance procedures used in our research allow this type of hypothesis is tested by including interactions between consumer characteristics and plan attributes. Juba and Lave²⁷ took a similar approach in which they explicitly hypothesized how individual characteristics such as education might modify the value attached to various plan attributes. They proceeded to test for the size of the net effects on choice of a particular plan. Such a method is insightful, but it cannot provide direct information about preferences for packages of attributes beyond the two plans observed in their study.

B. Likelihood of purchase of AHP's in a voucher program

In order to understand the decisionmaking of medicare beneficiaries, we have undertaken a two-phase empirical study. The first phase involved focus group interviews (a standard marketing re-

²⁵ N. Miller, N. and R. S. Baron, "On Measuring Counterarguing," *Journal for the Theory of Social Behavior*, 3 (1973), pp. 101-118. R. A. Osterhouse, and T. C. Brock, "Distraction increases Yielding to Propaganda by Inhibiting Counterarguing," *Journal of Personality and Social Psychology*, 15 (1970), pp. 344-358.

²⁶ A. J. Silk and Glen L. Urban, "Pre-test Market Evaluation of New Packaged Goods: A Model and Measurement Methodology," *Journal of Marketing Research*, 15 (1978), pp. 171-191. D. G. Morrison, "Purchase Intentions and Purchase Behavior," *Journal of Marketing*, 43 (spring 1979), pp. 65-74. P. Wright and M. A. Kriewall, "State of Mind Effects on the Accuracy With Which Utility Functions Project Market Choice," *Journal of Marketing Research*, 17 (1980), pp. 277-293.

²⁷ D. A. Juba, Judith Lave, and J. Shaddy, "An Analysis of the Choice of Health Benefit Plans," *Inquiry*, 17 (spring, 1980), pp. 62-71.

search technique) with beneficiaries to gain insight into their understanding of health insurance, their receptivity to a voucher system, and preliminary insight into their preferences for the features of health plans that might be available under a voucher system. This study then served as input to a quantitative phase in which a large number of plans were structured so that their attributes varied systematically according to experimental design criteria.

Focus group research.—Six group interviews each with six to nine randomly selected participants were conducted. Participants were selected from urban, suburban, and rural areas of Cook and Lake Counties in Illinois. The majority of the participants had supplemental medigap coverage. Many of these individuals were unable to specify what was covered by their medigap policies and for those who did specify coverage there tended to be an overestimation of benefits. It was apparent from their comments that medicare beneficiaries, including well educated ones, have difficulty in understanding both current medicare coverage and their supplementary policies.

Interest in a voucher system seemed to be higher among those groups with higher educational and income levels. They liked the idea that they would have more choices than under the current medicare program. Those with lower educational levels found the voucher concept harder to understand and were concerned that private insurance companies might take advantage of them and that they would have difficulty making choices among alternatives. Interest in plan features under a voucher program was probed, especially regarding HMO's, acceptable levels of deductibles for traditional insurance, and long-term care coverage.

Participants who had joined an HMO or had heard about the experiences of close friends or relatives were quite enthusiastic about them. However, many participants expressed concerns about some aspects of HMO's. Some were concerned that HMO's involved clinics in which one could not regularly see a competent physician. Another related concern of some was the fear that they would not be able to use their present physician. Many were also concerned about hospital restrictions. A significant number were sufficiently concerned, however, about their current physician retiring or dying that they expressed some interest in an HMO. There was also a surprising amount of mistrust and negative affect toward their physicians, suggesting that some individuals would be willing to switch anyway.

The overall impression obtained from these discussions of HMO's is that most medicare beneficiaries are unfamiliar with them but that the availability or extended coverage at a reasonable price and freedom from the task of claim filing is very appealing. Many have sufficient concerns, however, about lack of freedom of choice among providers, a clinic approach to care, possible incompetence of providers, and the possibility of financial insolvency that they would be reticent about joining an HMO were that offered under a voucher program. It is apparent that special promotional efforts would have to be undertaken by HMO's in order to provide information that would eliminate these concerns.

Interest in and concern about long term care coverage was high. Participants were generally aware that nursing homes are very expensive and were concerned that they would be unable to afford nursing home care should that be needed. Most of the participants thought that nursing homes were institutions they wanted to avoid—their disparaging comments about nursing homes were quite graphic. If at all possible, they wanted to stay at home. Many participants expressed willingness to pay for coverage that would optionally provide home health or nursing home care, as appropriate, at a cost of \$20 to \$25 per month and a few were willing to pay \$40 to \$45 a month in premiums.

Survey research.—The second phase of the study involved a nationwide survey of 2,016 noninstitutionalized persons over age 65, using the Consumer Mail Panel of Market Facts, Inc. The sample was drawn to match census data on income, education, and population density of residence area. The survey does not include currently institutionalized people (perhaps 5 percent of the medicare population) a group that will require special treatment in the initiation of a voucher system.

Respondents were asked to indicate their likelihood of purchase of eight health care plans (or remaining with current medicare), using a 10-point scale ranging from "not at all interested in choosing," to "extremely likely to choose." Three sets of ratings were given, under three separate conditions: Current medicare still available, current medicare unavailable, and current medicare unavailable with waiting periods invoked whenever people switch among plans.

Four major attributes (physician restrictions, hospital restrictions, long-term care coverage, and availability of current medicare as an option) were varied within-subject. This means that each respondent judges all possible combinations of these attributes. Hospital participation was either unrestricted, or limited to "a single major hospital in your area." Physician participation was either unrestricted, limited to a single group practice, or limited to a "list of physicians and group practices." The single group practice was only offered with hospital restriction (corresponding to most group practice HMO models), while the plan with a list of physicians was offered only without hospital restriction (corresponding to many IPA models). For purposes of analysis, the two levels of physician restriction were combined, creating a realistic 2×2 design of physician of hospital and physician restrictions. In keeping with the majority of HMO plans, all physician restricted plans had a zero deductible and zero coinsurance. All unrestricted physician plans had 20-percent coinsurance and a catastrophic stop-loss at \$2,500.

Other plan attributes were manipulated between-subjects in order to reduce the number of plans that the respondents must judge. This means that each respondent is exposed to only one level of each of such variables. These attributes included price (see details below), extent of mental health benefits, sponsor, order of presentation, deductible level (physician unrestricted plans), and reputations of physicians (restricted physician plans).

Price was manipulated by taking the estimated fair price for each plan (a function of benefit levels and provider restrictions) and pricing the plan \$15 per month above or below that value. This

allows an examination of price unaffected by its collinearity with plan benefit levels and provider restrictions. The base price for each plan started with the current \$12.20 per month subscriber cost for medicare part B. Further adjustments in plan costs were based on the following: Premiums actually charged for current medigap policies; actuarial analyses submitted to DHHS by Coopers & Lybrand, Inc., and by Richard Mellman of Prudential Insurance Co.; written advice provided by the actuarial department of Blue Cross; estimates distributed by specialists in long-term care; experience with mental health coverage in the FEHBP; and analyses of out-of-pocket expenses of medicare beneficiaries from HCFA.

Effects of plan attributes on purchase intention.—The survey data were analyzed using analysis of variance and analysis of covariance. The factorial design employed in this study allows for estimation of the main effects of plan features, as well as their interactive effects with other features.²⁸ When an interaction is found, this indicates that the effect of a variation in a given plan feature depends upon the level of some other feature. The systematic testing for interactions is a particularly valuable feature of our methodology.

Under a voluntary program, the default medicare option is strongly preferred on average relative to the alternative plans. This finding does not mean that some specific plans are not highly rated by the respondents or by specific groups of respondents. Indeed, a market share analysis (see below) reveals that if beneficiaries had available to them and were fully informed about all eight plans created by the variations in hospital restriction, physician restriction, and long-term care benefits, medicare would only retain about 50 percent of the market for health plans.

For the alternative plans, all of the variables manipulated within subjects have main effects upon purchase intention. Of the three, hospital restriction has the largest effect. The average medicare beneficiary surveyed does not wish to purchase plans restricted to a single hospital if this carries with it only a \$7 per month reduction in plan cost. We may have underestimated the achievable savings with a restriction of hospital choice, but the \$7 in marginal savings is not trivial in relation to other price variations. Respondents are much more positive about physician restrictions, however, with a slight preference for this feature. The difference is of the same order of magnitude as the difference in preference due to a \$30 between-subjects manipulation of price, and is associated with an assumed savings of \$22 per month reduction in plan cost due to restricted physician choices.

As suggested by the focus group research, the inclusion of extended long term care benefits (custodial care benefits in an institutional or home setting) also results in a statistically significant increase in likelihood of plan purchase. This preference exists despite the fact that a plan with extended long term care benefits costs \$15 more per month than a plan without such benefits.

²⁸ Major aspects of the methodology are based on Stephen A. LaTour, and P. Miniard, "Considerations in the Analysis of Repeated-Measures Designs," *Journal of Marketing Research*, 20 (February 1983), p. 84-95.

It is important to point out that each of these variables is involved in significant interactions with some other variables. The long term care benefits variables, in particular, seems to play a pivotal role in interacting with other variables to influence purchase intention. This interaction pattern for example, reveals that purchase intention is enhanced in a multiplicative rather than an additive fashion when both unrestricted hospitals and long-term-care benefits are present in a plan.

The size of the deductible does not seem to matter very much, given our premium pricing rules, except under a mandatory voucher system where it matters for nationally sponsored plans—a nationally sponsored plan with a \$300 deductible is preferred to a zero deductible or \$800 deductible.

C. Evidence of adverse selection and implications

Two analyses of covariance were performed to determine whether purchase likelihoods for plans are related to either past utilization history or history of serious health problems. For the first analysis there were three covariates: Number of doctor visits in the past year, binary coded variable representing whether or not the respondent had been admitted to a hospital in the past year, and a binary coded variable representing whether or not the respondent had been in a nursing home in the past year. For the second analysis there was one covariate, total number of health problems checked on the questionnaire, ranging from 0 to 11. All within-subjects and between-subjects factors previously discussed were included in the analyses. The only difference was that the comparison to determine possible selection bias for medicare under a voluntary voucher program involved a comparison between the respondent's medicare rating and the alternative plan that the respondent rated most highly.

There are three findings concerning selection effects for the utilization measures, none of which affected the medicare comparison. The first involves an interactive effect of past physician utilization and physician restrictions. The interaction is such that the likelihood of purchase of restricted physician plans relative to unrestricted plans is somewhat greater for those with a lower number of visits to a physician in the past year. Another effect involving utilization involves hospital utilization interacting with plan sponsor (Blue Cross/Blue Shield versus national commercial insurer) and physician restriction. The pattern of the interaction reveals that those beneficiaries who have been hospitalized prefer a nationally known commercial insurance company and this is particularly true for unrestricted physician plans.

The number of health problems interacts with long term care benefits and type of voucher program. Those with more health problems checked are more likely to purchase plans with expanded long-term-care benefits and this is somewhat more likely under an optional voucher system.

The selection effects reported above should eventually be incorporated into the relative pricing of plans for an analysis of system equilibrium. We have not yet done this, but our view is that the effects do not seem large in comparison with the \$30 between-subjects variation included in the prices.

Our study fails to find evidence for overall favorable self-selection for AHP's in a voluntary system. Our likely reason for this contrast with earlier studies is the greatest range of options made available in our study, beyond simply prepaid group HMO's. In addition, the offering of expanded coverage for long term care may be especially important in attracting away high-utilizer subgroups to AHP's. It is important to realize, however, that the extent of favorable self-selection for AHP's may be altered by the actual plans available in any given market area.

Given the relatively mild results regarding selection bias at the quoted prices, we have proceeded to estimate market share percentages (for the set of within-subject variations under fixed levels of the between-subject variations). The procedure that we have employed is adapted from existing literature in marketing research.²⁹

For a voluntary voucher program, just slightly fewer than 50 percent of medicare beneficiaries would opt out of the current medicare program, at the prices quoted for the alternative plans. Of those who would opt for an AHP, a majority is estimated to enroll in HMO-type plans with physician restrictions. These are certainly higher levels of switching to AHP's than have been found in the medicare HMO demonstrations, but in this study many more options of possible interest to medicare beneficiaries are available. Under a mandatory voucher system, the aggregate market share of plans without hospital or physician restrictions is estimated to be slightly more than a third. HMO-type plans with physicians restrictions are estimated to attract roughly 50 percent of all eligibles.

Actual market share estimates in a given area will depend upon the characteristics of the offered plans, and the level of information that each beneficiary has about the offered plans. These results are based upon complete information about the attributes varied in this study, something which is unlikely to occur in the marketplace. In the next section we make suggestions for implementation of vouchers, taking into account information problems.

IV. IMPLEMENTATION SUGGESTIONS

Implementation of a voucher program warrants great care. Our suggestions pertaining to fundamental issues of phased implementation, regulation of plan benefits and information management are as follows:

Implementation of a mandatory voucher system should be a gradual process of including new retirees, given the desire of many current beneficiaries to stay with the current program. The process should not be so gradual, however, as to make the total number of available beneficiaries too small in the early years to attract a variety of plan sponsors, particularly in areas where the elderly population is relatively sparse. We would suggest announcing to all those individuals who will reach retirement age in the next 3 years that the voucher program will include them as of a date 3 years in the future. Thus at the start of the program those aged 65 to 67

²⁹ Glen L. Urban and John R. Hauser, "Design and Marketing of New Products," (Prentice Hall, 1980).

would be required to participate. Participation could be available on a voluntary basis to all other medicare eligibles.

The inability of many medicare eligibles to understand insurance terminology and the effects of plan features means that educational efforts must be undertaken with them prior to implementation. This is another reason for phased implementation—to provide younger retirees with information about alternative health plans prior to the point at which they must make decisions. In addition, with the passage of time, these younger beneficiaries are increasingly likely to have had experience in making choices among alternatives in employer-sponsored group health plans. Older individuals eligible to participate on a voluntary basis would presumably not do so if they had serious concerns about their inability to understand major plan features.

In order to assure high levels of information about specific alternative plans once a voucher system is implemented, it would be desirable to have a Government-sponsored brochure that compared available plans along relevant dimensions as in the FEHBP. We would not limit, as has been proposed in some legislation, the provision of additional information by plan sponsors who wish to send supplemental brochures or spend money on other forms of advertising. In fact, if one policy goal is to promote participation in more cost-efficient plans, advertising freedom would be necessary in order for HMO's to provide necessary information on their qualifications, financial health, and practice patterns to address consumer concerns about these matters.

Minimum benefit definitions with some catastrophic stop-loss limits are advisable, especially if cash rebates are allowed. These definitions can be approached with the goal of thwarting extreme misinterpretation or misrepresentation of plans. One example would be to require that, for all plans other than "gatekeeper models" which require all referral specialty care to be prior approved, expenses on any services covered at all (with medical justification) must be included in calculations for the catastrophic cap.

V. CONCLUSIONS

The following points summarize and conclude our discussion of the analytic issues for a medicare voucher system.

One, a phased, mandatory replacement voucher system is arguably superior to a voluntary system in many respects: In rendering the Federal Government expense more controllable in the aggregate as well as in geographic distribution, in removing the inefficiency of the subsidized medigap market, in promoting new approaches to private health insurance, including HMO's, other types of restricted provider plans, and coverage of long-term care with associated medicaid savings.

Two, loss of the medicare hospital discount may be costly to some consumers who strongly prefer to have free choice of hospital (no change in copayment in relation to hospital prices). The loss would be largely mitigated for other consumers simply by selecting plans that lead to; First, reduced use of higher priced hospitals, second, pressures to compete on price, and/or third, incentives for physicians to reduce hospital use. The Government might require that

AHP's be allowed the same discounts given by hospitals to any other third-party carrier; such a regulation would involve a value judgment about appropriate cross-subsidization among classes of hospital payers.

Under current arrangements, it is not reasonable to expect that Medicare could heavily exploit its monopsony position without reducing the supply and/or quality of services to beneficiaries. Even voluntary vouchers, appropriately priced to avoid losses to the Government, would provide an opportunity for people wishing to buy more and better care (medigap plans would not suffice because hospitals cannot bill the patient for costs above the Medicare limit even though that care may be valued by beneficiaries). It would also be beneficial to people wishing to buy into other forms of cost-conscious AHP such as a simple high coinsurance plan.

Three, self-selection bias within a mandatory system might threaten the viability of high-benefit plans that have free choice of providers, unless individual risk rating of vouchers is developed—for example, age might be used for differential voucher pricing. Our arguments and evidence on this problem are less pessimistic than other authors, even in a voluntary system. With a system of open enrollment, a problem of people planning to switch into a high-benefit when they get older or foresee high expenses can be addressed with an appropriate delayed entry fee (perhaps an age-rated surcharge), or more simply a waiting period on full coverage of preexisting major health problems.

Four, the potential market share for plans restricting choice of physician in order to achieve cost savings appears from our research to be higher than would be expected from past retrospective studies of HMO choice, particularly if a variety of plans is offered. The offering of expanded long term care benefits would be particularly appealing to consumers.

Five, a restructuring of Medicaid for the elderly by channeling much of current spending into premiums for Medicare options (and especially for long term care) would promote more efficient choices. Our approach to catastrophic coverage and Medicaid changes would limit the sensitivity of the program to problems associated with low-income individuals choosing low-benefit plans.

A MEDICARE VOUCHER SYSTEM: ISSUES AND CONCERNS

(By HAROLD S. LUFT, Ph.D¹ University of California,
San Francisco)

The paper by Friedman, LaTour, and Hughes provides a clear description of how a voucher system might be used to address some of the problems faced by the medicare system.² It offers a method of capping the Government's cost for medicare and promises further cost-containment gains through the expansion of competitive processes. The author is making the case for the use of mandatory vouchers and identify several of the implementation strategies to enhance the likelihood that such a system would work. In this paper I will discuss the authors assumptions, raise some additional implementation issues that must be addressed, and offer some more general policy concerns.

These comments are intended to help policymakers think about the desirability of a voucher system and the modifications necessary to make such a system work well. As has Alain Enthoven, 1980,³ the authors make a strong case in favor of vouchers, and I agree that such proposals have many merits. However, there are also specific weaknesses that should be considered by advocates in order to strengthen the proposals. The first part of the discussion focuses on whether a voucher system will work as well as its advocates suggest. The second part asks whether such a system would be desirable even if it worked as advertised.

IMPLEMENTATION ISSUES

There are several issues that bring into question the feasibility of a voucher system as one attempts to move from the economist's drawing board to the reality of the market place. These implementation issues include, (1) adverse selection, (2) attractiveness of alternative health plans, (3) administrative problems in a multiple option system, (4) regulation, and (5) implementation costs.

Adverse selection

The authors recognize that adverse selection is a priority research issue, yet they argue that "there are grounds for doubting that the practical problem is very large." Curiously, they reference

¹ I am grateful to Deborah W. Garnick and Susan C. Maerkl for helpful comments on an earlier draft.

² Bernard Friedman, Stephen A. LaTour, and Edward F. X. Hughes, "A Medicare Voucher System: What Can It Offer?" Presented to the Conference on the Future of Medicare, sponsored by the committee on Ways and Means, the Congressional Budget Office, and the Congressional Research Service, Nov. 29-30, 1983.

³ Alain C. Enthoven, "Health Plan: The Only Practical Solution to the Soaring Cost of Medical Care." (Reading MA: Addison-Wesley, 1980.)

some of the existing research indicating that selection bias is a substantial problem in the federal employees' health benefits program and in several medicare demonstration projects.⁴ Numerous private employers are finding selection bias to be an increasingly important problem.⁵ Moreover, in most employment-related situations there is a crucial difference with the proposed voucher system. If adverse selection occurs, the employer may cross-subsidize through the contribution or premium so that the extra costs of the plan with higher risk employees are borne at least partly by either the employer or the other options. (These internal adjustments often occur when high and low options are offered. The premiums quoted usually reflect the actuarial value of the plan, not the actual experience.) Cross-subsidization dampens the adverse selection problem. The proposed voucher system, however, does not include such transfers among plans, and cross-subsidization would be difficult to implement with any cover system using different carriers.

In principle, establishing premiums and vouchers according to risk classifications is an attractive solution to the adverse selection problem, but in practice it may run into difficulties. Age and sex categories are rather crude measures, and evidence from the medicare capitation demonstration projects indicates that even a fairly complex classification system accounts for only a small fraction of the variation in utilization. To the extent that the risk adjustment is incomplete, carriers have incentives to selectively attract potential enrollees whose expected utilization is substantially less than that indicated by their actuarial category. As I have indicated elsewhere, there are numerous devices that might be used by carriers and most of these techniques do not rely upon obvious schemes such as health examinations.⁶

There are also important policy questions concerning the design of risk-adjusted vouchers. People in high risk categories may have premiums that might be ten or more times higher than the premiums of low risk people. If the voucher does not cover the full cost of the premium, should the enrollee's share be a fixed dollar amount, irrespective of risk, or should it be a fixed proportion of the premium? Either choice raises issues of fairness (which will be discussed in more detail below) as well as issues of legality. Even simple age-rating may be contrary to age-discrimination statutes, and other risk categories may be similarly challenged on the grounds that they merely represent differences in average values and bear little relation to what will be experienced by any one individual. Such

⁴ See, for example, Friedman, LaTour, and Hughes in the work cited; Paul Eggers, "Risk Differential Between Beneficiaries Enrolled and Not Enrolled in an HMO," *Health Care Financing Review*, vol. 1, No. 3 (winter 1980), pp. 91-99; and Paul Eggers and Ronald Prihoda, "Pre-Enrollment Reimbursement Patterns of Medicare Beneficiaries Enrolled in 'At-Risk' HMO's," *Health Care Financing Review*, vol. 4, No. 1 (September 1982), pp. 55-72.

⁵ See, for example, Harold S. Luft, Joan B. Trauner, and Susan C. Maerki, "Rising Premiums in Multiple Option Health Insurance Plans: Causes and Potential Solutions." Presented at the American Public Health Association Annual Meeting, Dallas, Texas, Nov. 16, 1983. See also Marilyn Jackson-Beeck and John H. Kleinman, "Evidence for Self-Selection Among Health Maintenance Organization Enrollees," *Journal of the American Medical Association*, vol. 250, No. 20 (Nov. 25, 1983), pp. 2826-2828.

⁶ See Harold S. Luft, "Health Maintenance Organizations and the Rationing of Medical Care," *Milbank Memorial Fund Quarterly/Health and Society*, vol. 60, No. 2 (spring 1982), pp. 268-308.

arguments are analogous to those raised concerning sex-specific life insurance premiums.

The authors recognize that adverse selection may be a major problem in a voluntary plan because the basic medicare plan is likely to be left with all the high-cost enrollees as low-risk beneficiaries will be attracted into low-option plans. A mandatory voucher system does not eliminate the problem of selection, it merely transfers the risk from the Federal Government to the private sector. If the private carriers are not convinced that the risk adjustments are adequate, they will probably refuse to join the system. The authors report that quite a few new plans signed up for capitation experiments under a voluntary system. This may be an encouraging example of public spiritedness. Alternatively, it may be evidence that the vouchers were set so high that entrepreneurs expected to make a killing. The crucial point is that if substantial adverse selection occurs and cannot be controlled, a voucher system will quickly fall apart. Without strong evidence that adverse selection can be controlled or offset, are we willing to undertake a voucher strategy at this time?

Attractiveness of alternative health plans

There is reasonably good evidence that well-managed prepaid group practices deliver comprehensive medical care of good quality at a lower cost than the conventional system. The evidence concerning the performance of individual practice association HMO's, preferred provider plans, and other alternative health plans is either extraordinarily thin or nonexistent.⁷ It is possible that much of the purported savings are due to favorable selection. While the savings in the newer plans may be real, this is still largely conjecture. Yet, prepaid group practices have relatively limited appeal for the elderly who are not already members.

Extrapolating from their survey results, Friedman, LaTour, and Hughes assert that alternative health plans would capture about 50 percent of the market. Acknowledging that the greatest observed market share is 14 percent in Minneapolis-St. Paul, they argue that their figure is higher because more options would be available. Unfortunately, their methods used to estimate market share are not discussed fully. Even though such techniques may be common tools in marketing analysis, they have not been validated in an arena as complex or as important as the choice of health insurance plans.

Two examples of the limitations in the analysis of plan choices will suffice. It is curious that respondents seemed much more willing to accept severe limitations on their choice of physician than limitations on the choice of hospital. It appears that most respondents are not aware that physicians practice in a limited number of hospitals, so that limited choice of physicians effectively implies limited choice of hospitals. Furthermore, while a broader range of plan options increases the likelihood that any consumer will find a good match with his or her preferences, more plans imply small enrollee bases over which administrative costs can be spread, loss of

⁷ Harold S. Luft, "Health Maintenance Organizations: Dimensions of Performance." (New York: Wiley-Interscience, 1981.)

bargaining power by carriers, and greater opportunities for risk selection.

Administrative issues

A thorough analysis of administrative problems in a mandatory voucher system should be based upon the careful evaluation of demonstration projects. However, some of the issues that have arisen in multiple option health benefit plans and the Arizona Health Care Cost Containment System are worthy of discussion. One of the most important issues is how one should deal with persons who do not enroll in any plan. (Contrary to economic rationality, this failure to enroll even occurs when there are no out-of-pocket premium costs.) There should be a default option other than medicaid and public hospitals, yet who is to choose which plan gets these automatic enrollees? Locating potential enrollees is not a trivial matter either. The monthly social security check mailings, even if made available for informational inserts or private advertising, will not help inform those people who have checks deposited directly in their banks.

Friedman, LaTour, and Hughes propose a clever implementation scheme that would avoid disruption to current enrollees yet offer a substantial enrollment base when vouchers are initiated. If legislation were passed today, the voucher plan would become effective 3 years from now, in 1987. Everyone becoming eligible for medicare between now and 1987 would be in the mandatory voucher plan as of 1987. All other current beneficiaries would be offered voluntary vouchers. Of course, such a strategy also reduces the short-run impact on medicare program costs. Moreover, making voluntary vouchers available to current beneficiaries increases the potential for adverse selection.

Advocates of vouchers generally underestimate the amount of consumer education about health plan options necessary to provide both reasonable choice and consumer protection. A simple listing of copayments and exclusions is far from adequate. Enrollees need to understand fully the benefit coverage and financial incentives in each plan. Even with the same listed coverage, insurers may vary in their determination of medical necessity and in the level of usual and customary fees, which are the basis for benefit payment. As one moves from conventional insurance plans to preferred provider organizations, HMO's, and other alternative systems, the structure and performance of the delivery system becomes more complex and correspondingly more difficult to explain. (The authors note that the Kaiser mailings to medicare beneficiaries seem not to have been completely understood.) With an increasing number of options the problems of providing the relevant information to local beneficiaries becomes even more difficult.

Regulation

Proponents of voucher plans often underestimate the regulatory issues involved. Conventional insurers are regulated by the States, with varying degrees of effectiveness. The regulatory oversight of HMO's and other alternative delivery systems is split between Federal and State authorities, and in some States certain types of

plans can avoid regulation.⁸ Yet regulation is necessary to assume minimum benefit provisions—and thus protect the medicaid program from low-option plans seeking to attract low-income beneficiaries with cash rebates. Regulation is also necessary to avoid the types of fraud and abuse that occurred in the early 1970s under California's Prepaid Health Plan program for medicaid beneficiaries. While consumer sovereignty argues against regulation, consumer ignorance and the political liability of a scandal argue for regulation. Monitoring plans appropriately is an extraordinarily complex task requiring substantial skill, but there is little incentive and fewer resources for the Government to try to do it well. Private employers typically avoid the regulation issue by dealing with a small number of carriers with proven track records. Employers cannot be sued for excluding plans they do not like as long as they are in compliance with the HMO Act. The ability of HCFA to exclude plans from a voucher market will be substantially more limited because of the public nature of the program.

The question of regulation is also linked to the adverse selection problem. It is probably impossible to design an automatically self-correcting risk adjustment system. Instead, HCFA actuaries must continually monitor enrollment patterns to see if plans have figured out subtle ways of selecting low-cost enrollees and then design ways to offset those strategies. This monitoring will be even more difficult in the future when one can no longer use as a benchmark the costs of individuals while in a uniform medicare plan. If this actuarial adjustment is not done, the more clever, not the more efficient, firms will eventually drive out the others. One might suspect that the potential for short-term profits could even lead to fraudulent behavior that might result in a political reaction against the voucher system, such as occurred in the California Prepaid Health Plan scandals of the early 1970's.

Implementation costs

Finally, the authors recognize that a voucher plan would eliminate the Government's monopsony power and its ability to command below-market prices. While it is true that this power cannot be exercised without limit, a voucher system would probably entail a 10-20 percent increase in hospital charges for medicare beneficiaries. To this must be added the startup costs of the system and the regulatory structure. This implies that not only will the potential savings be realized several years after implementation but the cost to medicare may increase substantially in the interim.

EQUITY ISSUES

The previous discussion outlined several reasons why a voucher plan may not work as well as one might hope. However, even if all the necessary corrections could be made, there are some important equity issues that must be considered in order to decide whether such a plan is socially desirable. Equity questions are usually framed in terms of the benefits to different income groups, but in

⁸See Joan B. Trauner, "Preferred Provider Organizations: The California Experiment." (San Francisco: Institute for Health Policy Studies, University of California, San Francisco, Monograph Series, August 1983).

this case the issues are somewhat broader. They will be discussed under four major areas: (1) blaming the victim, (2) regional inequities, (3) educational inequities, and (4) Government commitment over time.

Blaming the victim

One underlying concept of insurance is the notion of risk pooling, which is associated with the often-held belief that because all members of the community are at risk of medical adversity, all should share in paying for insurance against such events. The shift from community to experience rating is a movement away from such sharing of responsibility. Risk rated premiums and vouchers—if the enrollee's cost is tied to the risk category—is an additional major step away from the community concept. This experience rating may be explicit, for instance, by establishing a risk class for persons with a history of cancer. Of more concern, however, is the implicit sorting out of risk associated with selection. Suppose that a local fee-for-service plan is the only plan to cover hospitalization at a renowned cancer center, such as Sloan-Kettering. This plan will attract a disproportionate share of cancer patients, and its premiums will increase. There may be a tendency for HCFA not to risk adjust the vouchers in this case and merely blame the higher premiums on inefficiency. Of course, not adjusting the vouchers to reflect this risk differential merely adds a financial burden to those who are already suffering because of poorer health.

Regional inequities

Friedman, LaTour, and Hughes point out that one of the problems with a voluntary voucher program is that a national rate will be too generous in some areas and too low to avoid adverse selection in other areas. While a mandatory voucher eliminates the cost of adverse selection to the Government, it does not alter regional cost patterns. In currently high cost areas the voucher either will require substantial additional enrollee payments or will force people into low option or restricted choice plans. Both of these effects will tend to increase adverse selection problems.

The impact of regional differences is likely to be greater in the voucher program than under DRG's because of the adverse selection potential. Furthermore, the regional inequity problem shares two aspects of the risk-rating problem—the burden of an inefficient local system is borne by local residents, rather than by providers, and the voucher scheme provides an incentive to ignore differences in resource costs will attributing all premium variations to inefficiency.

Educational inequities

As has been discussed above, the evaluation of various health plan options is an extraordinarily complex task. Most large employers do not have the expertise to evaluate adequately the plans they offer. A voucher system, even with substantial regulation of advertising, is likely to be comprehensible only to the well educated. The less well educated may be easily misled. The problems with medigap plans are likely to be repeated, but with more serious con-

sequences because victims will find themselves with unusable coverage rather than just inflated costs for supplemental policies.

Government commitment over time

A final concern has to do with the determination of voucher levels over time. The Government is clearly interested in reducing its expenditures for health care. Under the existing medicare system, the Government, as the largest purchaser of medical care, can use its monopsony power to demand price reductions, as under DRG prospective payment, or to introduce other changes, such as altering relative fee levels or constraining coverage of certain technologies. Because under a voucher system the Government's contribution will be divided among many insurers, this power will be lost and the only control available will be a constraint on the rate of growth in the amount of the voucher. With continuing budget deficits, there will be a strong incentive to reduce that rate of growth and, thereby, to shift more of the premium cost on to the beneficiaries.

In the past, providers such as physicians and hospitals have had the political power to avoid major threats to their incomes and, as a by-product, to protect medicare beneficiaries. The passage of prospective payment suggests a shift in the political balance of power, and vouchers will further fragment providers. Furthermore, the voucher program itself will no longer have a means of determining costs because of selection problems, so allegations that the voucher should be growing more rapidly may be passed off to efforts to subsidize inefficient providers. The question, then, is whether a voucher scheme will eliminate too many checks and balances in the political process.

CONCLUSIONS

Despite some appealing aspects of a voucher program for medicare, there are important uncertainties about its feasibility and desirability. The adverse selection problem is perhaps the largest single question mark. Unfortunately, theoretical discussions cannot tell us how important a problem adverse selection will be. To get an answer, major demonstration and evaluation projects would have to be undertaken. Such demonstrations also might help to determine whether or not alternative health plans can attract enrollees and whether the administration and regulation of a voucher plan is feasible in the real marketplace. Trying out the system also would provide an estimate of the costs associated with implementation and the loss of monopsony power. It is important to recognize that voluntary vouchers are not a suitable test case. Just as some States have been allowed to experiment with all-payor systems, perhaps others could be induced to experiment with vouchers on a statewide basis. It is surely better to experiment at the State level than to risk the entire medicare system in an experiment.

Even if adverse selection is not too great a problem and the implementation of a voucher system is not too difficult, we need to ask whether such a system is desirable. It has the potential for capping Federal expenditures, but there is no assurance that this will be done by promoting efficiency rather than by shifting the cost

burden to the beneficiaries, especially those who are least able to afford such costs. Whether an efficient and equitable voucher system can and will be designed is a question that requires political as well as technical judgment.

HOSPITAL PAYMENT UNDER MEDICARE

(By JUDITH R. LAVE, *University of Pittsburgh*)

INTRODUCTION

In April 1983, Congress passed and the President signed Public Law 98-21, the 1983 Social Security Amendments, which established a national medicare hospital prospective payment system, a fundamental change in the method used by medicare to reimburse hospitals for services rendered to beneficiaries. This law followed shortly after the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA), which had made radical changes in medicare reimbursement policy. Even with these changes, which are estimated to save \$6.8 billion between 1983 and 1985 over the prior law, the Medicare Hospital Insurance Trust Fund is expected to go broke by 1990.¹ Consequently, the Congressional Budget Office and the Congressional Research Service were asked by the Committee on Ways and Means to convene this conference to provide guidance on possible future changes in the medicare program. It is my charge to focus on payment options for hospitals.

The discussion of options for change in the way the Federal Government directly reimburses hospitals should be more limited than that for the other areas that will be addressed at this conference. The reason for this judgment is simple: a major structural change (reform?) has just been implemented and it seems prudent to see how the health care system will adapt to it. Piling on another major change at this time would be dysfunctional and it would probably negate the benefits of both changes. This limitation does not mean that the States should be discouraged from establishing alternative reimbursement systems in which the Federal Government participates.

This paper, like Gaul, is divided into three parts. First, there is a brief summary of medicare hospital reimbursement policy. Second, certain features of the current system are examined and options for minor changes in current law—some designed to save money and others to increase the equity of the system—are proposed. In addition, the major incentives embodied in the prospective payment system are discussed. Third, some of the inherent problems in managing a restrictive hospital inpatient reimbursement program in essentially a fee for service system in an era of structural changes are addressed. These, in conjunction with trends in the private sector, lead to some recommendations for changes in the administration of the program (in the short run) and for major

¹ "Prospects for Medicare's Hospital Insurance Trust Fund" prepared by the Congressional Budget Office for the special Committee on Aging, U.S. Senate, 98th Congress, 1st session (1983).

changes in the structure of the medicare program in the longer run.

I. OVERVIEW OF HOSPITAL REIMBURSEMENT UNDER MEDICARE

In 1965, Congress enacted the medicare program, the goal of which was to provide Federal health insurance for the elderly in order to improve their access to mainstream medical care.

The law establishing medicare mandated that institutional providers should be reimbursed for the reasonable costs of providing services to beneficiaries. In 1965 this reimbursement principle, which had been endorsed by the American Hospital Association as early as 1953, was the basis of hospital payment for most Blue Cross plans, the largest private third party payer. Thus, in incorporating cost based reimbursement, medicare was following the then predominant practice.² Between 1966 and 1982, this reimbursement principle was followed although there was considerable tightening of the definition of reasonable costs both through legislation and through regulation.³

Between 1966 and 1982 the costs of the medicare program exploded. Hospital reimbursements, which represent about 99 percent of part A expenditures and 71 percent of total medicare expenditures, increased at an annual rate of about 20 percent. Some of the increase in expenditures was attributed to an increase in the beneficiary population (due to the expansion of entitlement to the disabled and to people with end stage renal disease and the growth of the over-65 population), and some to an increase in utilization. But most of the increase was attributable to increases in the unit cost of care—the cost of a hospital day. Retrospective cost based third party reimbursement, in a world with little patient cost sharing and an open ended entitlement, was considered to be the major factor contributing to the explosion in hospital costs.⁴ The increase in costs, accompanied by the associated increase in hospital revenues, facilitated the expansion of the hospital sector. It encouraged an upgrading of hospital facilities and services (in 1965 some were quite bad) and improved the access to the hospital system by the elderly in general and the disadvantaged elderly in particular,⁵ this increased access was a goal of the program. However, if in 1965 when medicare was passed improving access to the health care system was the major concern of public policymakers, by the mid-1970's cost containment was the overriding concern.

In 1982, the Congress passed TEFRA which changed hospital reimbursement methods. First, the basis of reimbursement was shift-

² The factors leading to the original reimbursement policies are discussed in H. M. Somers and A. R. Somers "Medicare and the Hospitals" (Brookings, 1967) and R. J. Myers "Medicare" (Irwin, 1970).

³ Some important changes are: The removal of the 2-percent factor and introduction of the nursing differential (1969), the introduction of limits under sec. 223 of the 1972 amendments and their continuous tightening, the revised rules for allocating cost of malpractice insurance premiums and the reduction of the nursing differential (1981).

⁴ These same conditions predominated in the private sector as well as the public sector. Underpinning the retrospective cost based system was a hidden stimulus in the form of tax exempt bonds which facilitated facility and equipment purchases.

⁵ See for example M. Ruther and A. Dobson "Equal Treatment and Unequal Benefits: A reexamination of the Use of Medicare Services by Race, 1967-1976" Health Care Financing Review, Winter 1981 and C. Link, S. Long, and R. Settler "Equity and the Utilization of Health Care Services by the Medicare Elderly" the Journal of Human Resources, Spring 1982.

ed from an implicit per diem system to a per case system; second, case-mix was incorporated explicitly into the payment system; and third, a limit was placed on the rate of increase in medicare costs per case that would be reimbursed. Although the language of the statute continued to use the term "reasonable costs," the concept was radically changed. Costs per case higher than 120 percent of the average costs of comparable hospitals (wage and case-mix adjusted) or which increased more than the target rate over the base year were no longer considered reasonable.⁶ TEFRA also required that the Secretary develop a prospective payment system. The Secretary reported to the Congress in December 1982, and by April 1983 prospective payment was embedded in law.

The basic features of the medicare prospective payment system are the following: (1) all patients will be classified into one of 468 diagnostic related groups (DRG's); (2) with the exception of a limited number of "outlier" patients, the hospital will receive a fixed payment per DRG to cover operating costs (initially capital costs and direct education costs will be passed through); and (3) the payment received by a hospital will vary with the area wages, whether it is in an urban or rural location and the number of full-time interns and residents it has on its staff. There is a 3-year phase-in period during which the payment rates shift from being essentially based on the hospital's own "reasonable" costs, to being set on a national basis (with the exceptions of the adjustments noted above). Thus, with limited exceptions, by 1987 payments to an individual hospital for care provided to medicare beneficiaries will not be based on its own costs.

The law contains a number of provisions requiring studies and reports that will help guide the evolution of the system. For example, a commission is to be established to conduct studies and to advise the Secretary on changes in "DRG" definition and payment rates; the Secretary is to monitor the progress of prospective payment and to report on such factors as the feasibility of adjusting DRG's for severity, and whether preadmission certification should be required.

With this background, we now turn to the body of the paper.

II. OPTIONS FOR CHANGE IN THE CURRENT SYSTEM

The medicare prospective payment system [PPS] represents a fundamental change in the way hospitals are to be paid. In order for hospitals to survive under the system, administrators must make basic changes in the way they collect and use information and how they interact with the medical staff. The professional associations and consulting organizations through conferences, workshops, and journals are providing hospitals with advice on how to prepare for PPS. While these structural changes are taking place, it does not seem wise to propose "another" approach to hospital reimbursement. In this section, therefore, certain features of the proposed system are examined and options proposed either to save

⁶ This is obviously a very simplified description of TEFRA. The ideas incorporated in TEFRA were incubating for some time. HCFA had been working on case-mix limit system for possible implementation under sec. 223 authority and had contemplated incorporating a rate of increase limit.

money or to improve the "equity" of the system. Two features, payment rates and adjustments for teaching, are discussed in considerable detail because I believe they need to be changed immediately.⁶

1. The payment rate

Under current law, the payment level for each DRG is to be established on a national basis by 1987 but will vary by hospital location (urban, rural), by area wage levels and by teaching levels. The concept of a national rate and the speed with which it is to fully implemented should be reevaluated.

Hospital care like all services is a locally produced and consumed good. Controlling for wage differences, teaching and location (urban/rural), there are significant differences in the cost per case by region. Some of this regional difference is due to regional patterns in length of stay, some is due to differences in the prices which hospitals have to pay for factors of production such as food and electricity and the rest to other unmeasured factors. Factor price information is consistently available at the local level only for wages. However, other prices also vary. For example, the "household" cost of food and electricity in Dallas are respectively 95 percent and 86 percent of the national average whereas in Philadelphia they are each 112 percent of the national average.⁷

These large regional differences are apparent both from data published by HCFA and from an early analysis of the regional effects of PPS. For example, after controlling for wages, case-mix, and teaching, the medicare cost per case of urban hospitals is approximately 20 percent higher in the east north central region than it is in the east south central region.⁸ Additionally, under a system with national rates, 62 percent of the hospitals in the ENC region would receive an average 13-percent reduction in their payments.⁹ These large reductions in some regions would be occurring at the same time hospitals would be experiencing considerable pressure because of the overall limit imposed on how much the rates on average can increase.¹⁰

If these reductions were being experienced by a small percentage of hospitals within a market area, there would be no particular reason for concern. However, given the magnitude of the necessary adjustments suggested by these numbers and the number of hospitals affected, there is, I believe, significant reason for concern. There is evidence from the State rate setting programs and from studies of the effects of section 223 limits, that the relative high

⁶ One issue that is not addressed is that of capital. Capital must be included in the DRG payment rate and the most feasible way of doing this is to add a fixed percentage to each DRG payment. Some grandfathering will be necessary, and or option to put a small percentage of the payment into a State pool, if the State so wishes considered.

⁷ From data reported in "Statistical Abstract of the United States," U.S. Department of Commerce, 1982, pp. 466 and 469. Data on these items are only available for a limited number of SMSA's.

⁸ Calculated from data in the Federal Register, Sept. 1, 1983. If medicare cost per case for hospitals in the Northeast is set equal to 1, the relative values for the other regions are mid-Atlantic, 0.92; south Atlantic, 0.93; east north central, 1.01; east south central, 0.84; west north central, 0.97; west south central, 0.91; Mountain, 0.91; Pacific, 0.98.

⁹ Personal communication, Congressional Budget Office.

¹⁰ To some extent the problem faced by some "regions" are mirrored by the hospitals in central cities. The wage adjustment used by HCFA is the SMSA wage, however, wages of central city hospitals are higher than those in the "ring."

cost hospitals have not reduced their costs. Thus we have no evidence that hospitals can adjust to this kind of reduction in payment levels.¹¹ Since the majority of the savings from prospective payment come from the limit on the rate of increase in rates, and not from the reallocation of payments among hospitals, it may be wise to consider a slow down in the phase-in of national rates. Such a slow down is necessary to sustain the system. (It is also questionable whether such a reallocation of medicare reimbursements to certain areas of the country is warranted when there is no evidence that the quality of care is lower there.)

Thus, I propose that the phase-in schedule be slowed down and that HCFA work with both the Bureau of Labor Statistics and the Bureau of Economic Analysis to collect better price data at the local level. This is likely to be a 5-year effort. If the phase-in is not slowed down, then better data should still be collected but in the interim the wage adjustment factor should be applied to 100 percent of costs.¹² (Better data, however, also need to be collected on wages as preliminary analysis by the Maryland Cost Commission of the HCFA Wage Index with more complete wage data, suggests the HCFA data are unreliable.)

2. The teaching adjustment

Under current law, the DRG payments to individual hospitals increase with the number of full time interns and residents per bed (IRB). The increment was determined by a statistical analysis of the relationship between the medicare cost per case and IRB (controlling for other factors) which indicated that costs rose 5.79 percent for every percentage point increase in the number of interns and residents per bed. The law mandates that this factor be doubled in setting the DRG rate for hospitals; in other words, teaching factor is to be doubled.

The doubling of the teaching factor means that the teaching institutions are at a strong advantage relative to other hospitals, and that the advantage increases with the size of the teaching programs. Thus, one option that would both save money and would treat all hospitals more comparably would be to reduce the size of the teaching factor. It should perhaps be noted that the "teaching factor" was originally doubled because the estimating equation contained variables (SMSA size and bed size) that are not considered in the setting of the payment rates but are positively correlated with IRB. If this coefficient alone were used to adjust for the indirect cost of teaching then the teaching institutions, particularly those in large urban areas, would be relatively adversely affected. Thus, HCFA should be directed to reestimate the teaching factor, using as control variables only those variables that are actually taken into account in establishing the payment rates. Preliminary evidence suggests that the teaching coefficient would increase from

¹¹G. Anderson and J. Lave "State Rate Setting Programs, Do They Increase Efficiency in Hospitals," *Medical Care*, forthcoming.

¹²This solution would be indicated by statistical results reported in J. Fettingill and J. Verrees "Reliability and Validity in Hospital Case-Mix Measurement," *Health Care Financing Review*, December 1982.

5.79 to about 9.¹³ Reducing the indirect teaching adjustment from 11.58 to 9 would save \$3 billion between 1985 to 1988.

For a given DRG, a teaching institution receives a higher reimbursement than a community hospital. This higher reimbursement compensates the institution both for the indirect costs associated with teaching and for the increased severity and complexity of patients seen. The teaching adjustment also helps to moderate the effect of the slight underpricing of the more complex DRG's resulting from the way that the payment rates are calculated.¹⁴ However, many cases treated in the teaching institutions are routine, uncomplicated cases. One option that could be considered would be to eliminate the teaching adjustment for a subset of DRG's that would be identified as routine cases by a panel of experts such as the Prospective Payment Commission.

The teaching adjustment is not designed to compensate these institutions for the relatively higher proportion of uncompensated care they provide. However, large teaching hospitals on average treat a sizable proportion of patients (20.3 percent) who are uninsured. This compares with 8.2 and 9.8 percent of admissions for nonteaching and small teaching hospitals respectively.¹⁵ Thus as medicare and other payors tighten their payments, the financial situation of these institutions will worsen. DRG payments could be increased so that medicare would share in the cost of providing care to people without the financial resources to pay for it. (Some of the money saved by reducing the teaching adjustment could be used to pay for uncompensated care.)

Thus it is recommended that HCFA be redirected to reestimate the teaching coefficient and that adjustment for indirect teaching costs be reduced. In addition, it is recommended that the medicare policy of not sharing in the cost of uncompensated care be ended and that the DRG payment (to all institutions not only the teaching institutions) be increased to reflect some sharing in that cost.

3. Outliers

Under current law, hospitalized patients who have long lengths of stay or who incur charges significantly higher than the average patient in a given DRG are classified as outliers and the payment to the hospital is adjusted upward. There is, however, no provision in the law to characterize patients who stay a very short time, relative to the average, as an "outlier" and to adjust the payment for them accordingly. Thus, for some DRG's, there may be incentives to admit someone as an inpatient who could be treated on an outpatient basis because it is profitable for a hospital to do so. (This outlier problem is one of a class of admission problems to be discussed in more detail below.) To limit this incentive, Congress should mandate that outlier criteria be developed for those discharges that stay a significantly shorter time than the average.

¹³ Personal communication from Gerard Anderson, Johns Hopkins University, formerly at the Office of the Secretary, DHHIS.

¹⁴ Office of Technology Assessment, "Diagnosis Related Groups and the Medicare Program: Implications for Medical Technology," Washington, 1983, pp. 31-32.

¹⁵ From special tabulations prepared by G. Anderson from a 1981 survey of hospitals conducted by the Office of Civil Rights.

(The incentive to admit short stay patients could also be reduced by establishing strong preadmission review criteria.)

4. Technology

Under current law, the Prospective Payment Commission is to advise the Secretary with respect to the general increase in rates to allow for technological changes as well as revisions in the definition of the DRG's and the prices paid for them. This continuous adaptation of the system is critical. The DRG system will stimulate the development of and introduction of general or DRG specific cost-reducing technologies. It is easy to predict, however, that there will be strong pressures on the Commission to expand the number of DRG's to adjust for different ways of treating similar patients, and to increase the relative price of each DRG as new but more expensive diagnostic and treatment procedures become available.

The revised payment system offers an opportunity to moderate the flow of new technology into the health care sector. Good information should be required before either payment rates or DRG's are revised.¹⁶ The Congress might consider providing some guidelines to the Commission and the Secretary to use in revising DRG's; for example, implicit standards could be developed on the need for expensive technologies to meet certain standards of effectiveness—where effectiveness would be measured both in terms of the effect on life span and life quality.

5. Rate of increase limits

The current law gives explicit direction on how payment rates should be increased at least in the near future. Essentially payment rates on average are to increase by "market basket plus one." The market basket is a measure of the rate of increase in the prices that hospitals have to pay for their inputs, and the additional 1 percentage point is to provide some room for "technological" change. As the market basket price index has consistently increased more than the price index of goods and services in general, this increase rule almost guarantees that medicare and average reimbursements per case hospital costs will continue to increase at a faster rate than the price of goods and services in general.

Thus, to reduce the escalation in the costs of the medicare¹⁷ program, either of these factors must be reduced. The current constraints are very tight relative to historical experience, and it seems worthwhile to see if they can be effective before suggesting tightening them further. (Tightening them further is also unrealistic unless the policy of quickly moving to national rates is reversed.) In addition, the amount that medicare pays is constrained by what is happening in the private sector. If the private sector does not follow medicare by implementing policies that complement its cost containing efforts, then the gap between the public and private payment rates would become quite wide. In that case,

¹⁶ There is considerable agreement that new technology is a major factor increasing costs and new procedures are often widely diffused before their effectiveness has been established. See for example S. Altman and R. Blendon, ed., "Medical Technology: The Culprit Behind Health Care Costs," DHEW Publication, N. PHS 79-3218.

¹⁷ One way to change this market basket index would be to substitute the increase of general area wages for the increase hospital workers wages.

it is unlikely that medicare could tighten its payment rates further unless a general cost control program is implemented.

6. State ratesetting

The current law gives some encouragement to States to implement "all payer" hospital State rate setting programs. It seems likely that the new medicare law will stimulate interest in such programs for a number of reasons. Some private insurers, for example, are concerned that the effect of the new medicare law will be to shift costs to them and they, therefore, would like to constrain the hospitals' ability to do so.¹⁸ In addition, hospitals, particularly those in the most negatively affected regions, may believe that they will have more control over their individual fates under a State ratesetting system than under a medicare DRG system. A State ratesetting system, with its built-in appeals process is likely to be more responsive to the needs of individual hospitals and the distribution of winners and losers is likely to be much different under the two systems. In addition, given that hospitals are important parts of the fabric of a community, many communities may want control over the structure of the hospital sector. Finally, as State ratesetting systems are all payer systems, they provide a social mechanism for dealing with the problem of uncompensated care and can moderate a tendency toward a "two class medical system for medicare patients."¹⁹ Many policy analysts argue that State ratesetting programs should be discouraged because they will stifle innovation and limit competition.²⁰ They believe that the disadvantages of ratesetting outweighs their advantages and that policymakers should seek other mechanisms for dealing with rising costs and bad debts. However, I do not believe that innovation at the State level should be discouraged; rather as mandated by Public Law 98-21, the Federal Government should support State ratesetting activity if it meets the Federal guidelines.

7. Cost containment

Can the medicare prospective system be effective, if it is the only payor that is limiting its reimbursements? Will the final result be a two-class system, in which public and private patients are separated either by facility or by treatment? Should the Federal Government once again try to implement general hospital cost containment legislation? Although there is no doubt that it is much more efficient to manage a DRG system in the context of an all payor system, my recommendation is to once again, take a wait and see strategy. Public expenditures represent approximately 56 percent

¹⁸ James Morefield, "View from Insurers" paper prepared for "Health Care Institutions in Flux: Changing Reimbursement Patterns in the 1980's," conference sponsored by the Institute for Health Policy and Administration, Department of Health Services Administration, George Washington University, Washington, D.C., September 1983.

¹⁹ In some regions the potential for 2-class system under State ratesetting exists if the total medicare "allocations" to a State is directly related to what it would be under a DRG system with national rates; particularly in the short run.

²⁰ F. Sloan, "The Academic Viewpoint" paper prepared for "Health Care Institutions in Flux: Changing Reimbursement Patterns in the 1980's" conference sponsored by the Institute for Health Policy and Administration, Department of Health Services Administration, George Washington University, Washington, D.C., September 1983. See also J. A. Meyer, "Passing the Health Care Buck, Who Pays the Hidden Cost," American Enterprise Institute, Washington, 1983.

of overall revenues. The private sector too is trying to control its expenditures on health care services and so it is highly unlikely that it will idly sit by and let the hospitals "cost shift." Thus, they too, are searching for innovative methods of controlling costs, and although one option is clearly to follow the Federal lead and base payments to the extent possible on DRG's other outcomes are possible. Although there may be some institutions that will not accept public payors, and some cases where treatment patterns will vary by patient payment source, this is unlikely to be widespread. However, if the rate of increase in hospital costs is not moderated or if a distinct two class system emerges, then it will be necessary to implement a general hospital cost containment program.

III. THE LIKELY EFFECTS OF THE MEDICARE PROSPECTIVE PAYMENT SYSTEM

Prospective payment represents a fundamental change in the method of paying for hospital care; a method with which we have limited experience.²¹ As noted above, for a hospital administrator to be able to respond effectively to the system, changes will have to be made in the hospital's accounting and reporting systems and the relationship between administration, trustees, and staff. The per case system should promote efficiency in the production of health care services and in the development and adoption of cost reducing technologies. It will have many other effects, possibly resulting in a decrease in inpatient hospital costs while increasing total health system costs or it may even lead to increased hospital use. These effects will have the consequence of offsetting some of the expected savings from prospective payment.

The most significant of these responses are listed below:

1. There will be incentives to decrease the services provided to patients; it is easy to predict bitter disagreements about whether these reductions are a "rational" response to newly imposed constraints or represent a deterioration in the quality of care provided.²² In addition, some hospitals will eliminate some services entirely and will stop treating certain conditions that require the curtailed services or are simply more costly than payments.
2. Lengths of stay for particular diagnoses should decrease, but use of home health agencies, nursing home beds, and rehabilitation centers will increase. It is possible that patients seen in these other settings will be "sicker" (and thus more costly) on average than those treated before the implementation of PPS.
3. The number of admissions and readmissions will likely increase. Some patients who could be treated as outpatients may be treated as inpatients. In addition, there will be some incentives to space treatments or operations (if possible) rather than

²¹ DRG's are the basis of payment in New Jersey. However, the rate for a given DRG varies across hospitals and are more closely related to the individual hospitals costs and many more patients are identified as outliers.

²² Some of the reduced services will be truly unnecessary while others will represent services that have a positive but small probability of affecting health outcomes. See for example W. Schwartz "The Competitive Strategy: Will it Affect the Quality of Care" in J. Meyers, ed., Market Reform in Health Care, American Enterprises Institute, Washington, D.C., 1983.

to do them during the same hospital episode. This incentive will be even stronger for those hospitals experiencing decreased occupancy rates—induced in part by shorter lengths of stay encouraged by PPS.

4. Preadmission testing should increase, as it will occasionally be possible to charge for preadmission testing under part B and collect the full DRG rate under part A. (This is a form of “unbundling.” The law makes it illegal to “unbundle” services while the patient is hospitalized—all services received must be covered by the DRG payment regardless of where that service was purchased; that is, a hospital could use an outside laboratory.)

5. Some legitimate recoding of diagnoses may take place. For example: if “frequency of urination” is noted as the primary diagnosis rather than “hypertrophy of the prostate” for a patient who has a transurethral resection of the prostate gland, the patient will be classified in DRG 306 rather than DRG 336. The payment for DRG 306 is about \$290 higher than that for 336.²³ In addition, if the payment to marginal cost relationship varies across the alternative treatment modalities, the treatment selected may be influenced by payment levels.

6. Since every DRG represents a collection of different diagnoses and conditions with their associated treatments, it is possible that some providers may attempt to establish policies to “skim” patients within a given DRG; that is they may try to select only the relatively inexpensive patients within a given DRG and transfer the sicker patients elsewhere (the extent to which such policies can be developed and physicians encouraged to follow them, is problematical).

7. Services that have been cross subsidized by other services are likely to be phased out. Some of these services such as social services, nutritional counseling, health promotion or prevention activities may be services that contribute to a decrease in the cost of post hospital care, but to an increase in inpatient costs.

8. The new financial arrangements will further stimulate the restructuring of the hospital sector. This restructuring of the hospital sector consists of the corporate restructuring of given hospitals, horizontal integration into hospital chains and vertical integration as the corporate structure links ambulatory care centers, hospitals, nursing homes, etc.

Some of these possibilities are a general response to the end of open ended financing, some a response to constraints being imposed on only one part of the system—the inpatient hospital sector. Other changes will be a response to the unit of payment (that is, the case and not the patient day) and still others a response to the definition of the reimbursement unit (the DRG with its imperfect patient classification and pricing system—however, no case-mix system will be perfect).²⁴

²³ Example was suggested by Jack Wennberg. The numbers were calculated from data in the Federal Register.

²⁴ Some, although not all, of the pricing problems for the DRG's should be eliminated when the rates are updated in 1986. At that point, the major possibilities of increasing the reimbursement by selecting the most profitable DRG rate will be eliminated.

The impact of these potential effects on the costs of the medicare program and the quality of care provided are difficult to anticipate. They may be so small that there is no need to develop countervailing regulations, or they may be sufficiently extensive to overwhelm the system. (The various incentives to increase admissions have been a major cause for concern. Yet the evaluation of the state rate-setting programs have indicated that the utilization effects were small.)²⁵ Many of these problems however, were identified by Congress which mandated that the Secretary do a series of studies and to make recommendations to modify the system. It also mandated that the Peer Review Organizations (PRO's) focus on both quality of care and appropriations of admissions.²⁶

IV. LONGRUN SOLUTIONS

If the perverse incentives that are embedded in the prospective payment system prove to be large, then I do not believe that they will be solvable within the current structure of the medicare system.

Medicare, along with most private insurance plans, makes coverage and reimbursement policies that vary according to the location of the service and the characteristics of the individual or group providing that service. As the number of alternative providers and sites increase, there is great pressure to extend medicare reimbursement to them. It is a fee-for-service system where decisions must be made about what prices are to be paid for which services in what location.²⁷ It is essentially an open-ended system, in which there are few limits placed on the number of units of service that will be paid for.

The current structure of the medicare program does not lead to the most efficient mix of services (inpatient, physician, outpatient, etc.) or to the "ideal" number of services. The current financing mechanisms become more problematical as the number of services and providers, which are both complements and substitutes for each other, increase. The problems multiply when there is considerable discretion as to whether to or how to diagnose and treat particular conditions. Under this system, the direction of regulation is clear: increased preadmission review, increased governmental regulation over how and where care is delivered, and increased control over the prices of the individual services. Most of the problems these regulations are designed to correct will exist regardless of the particular structure of a hospital prospective payment system.

²⁵ An analysis of the effects of State ratesetting on admissions and length of stay, found no effect on admissions. Length of stay in some States; i.e., New York, which paid for the basis of a per diem rate decreased relatively less over the studied time period than the average decrease across all states. See N. Worthington and P. Firo, "The Effects of Hospital Rate Setting Programs on Volumes of Services," Health Care Financing Review, December 1982.

²⁶ There has been some question about whether the payment rate should be reduced if the hospital experiences increased admissions particularly if the marginal cost of an admission is lower than the average payment rate. I would argue against this for two reasons: (1) Medicare admissions are only a fraction of total admissions, and they can rise when total admissions fall; (2) research indicates that if the increase in admissions is expected to be permanent then marginal cost is close to average cost. See B. Friedman and M. Pauly "A New Approach to Hospital Cost Functions and Some Issues in Revenue Regulation," Health Care Financing Review, Winter 1983.

²⁷ See for example, D. Young, "What Should the Government Pay for, and Where" in S. Altman et al, Ambulatory Care, (Lexington, Boils, Lexington, 1983).

There are two long run alternatives to increased regulation: increased cost sharing or increased use of competing capitated systems or managed health care delivery systems. The first option does not seem viable if past history is any guide. Many medicare beneficiaries would purchase supplemental medical insurance; for others, welfare assistance programs would bear the cost. Thus the incentive effects of increased cost sharing would not be realized.²⁸

The second option would in effect turn the medicare program from an open-ended system to a closed system by enrolling the medicare beneficiaries in managed health delivery systems. Although HMO's are the classic managed system, a number of other forms are emerging. This option would relieve the Federal Government from setting individual prices, would encourage the efficient mix of services and providers, would reduce the incentive to increase the volume of services, and would stimulate effective health education and promotion activities. It also would allow for regional variations in the practice of medicine. The drawbacks of capitated systems are equally well known. There is a need to adjust for health status of enrollees in order to reduce the disincentive of enrolling people with deteriorated health status and who will be heavy users of services. There is also an incentive to underproduce services. In addition, it is unlikely that these systems would have the same ability to set prices as the Federal Government which is exerting more and more of its monopsonistic power. Another paper at this conference is devoted to vouchers—and these issues are discussed in more depth there.²⁹

While medicare policy is undergoing change there are also some changes taking place in the private sector. Private payers (employers) are becoming more actively involved in health care policy and in seeking mechanisms to control their health care liabilities. One result is the increased growth of HMO's and of other alternative delivery systems including preferred provider arrangements. While preferred provider arrangements are still evolving, they seem to have some basic characteristics, the most important of which are strong utilization review and controlled use of providers. (The enrollee choice of providers can be restricted to a subset of providers, or they can use other providers by paying an additional fee.)

One way, however, for alternative delivery systems to reduce costs is to control directly where patients receive care. Thus, it is likely that they will promote the use of lower cost alternatives. One policy would be to limit use of tertiary care institutions to those patients needing tertiary level care. This control over the site of patient hospitalization is likely to take place even in ratesetting States as long as there are significant differences among hospitals in the cost per payment unit (day, case, or DRG). Thus, it seems likely that the long run effects of prospective payment systems,

²⁸ M. Gornick has proposed a system of increased cost sharing with a catastrophic cap. If the catastrophic cap were set at a "reasonable" level, it is possible that the elderly would not purchase supplemental insurance. However, this system does not really eliminate the need for separate constraints on hospital costs.

²⁹ In the short run, it would make sense to merge the two parts of medicare administratively. The distinction between inpatient and outpatient care are becoming blurry. In addition, to the extent that the HCFA contractors move from being primarily claims processors, to more active monitors of the use of services, they need to know about the overall use of services not just one piece.

controlled patient choices, and the growth of alternative delivery systems will put significant pressure on our premier health care institutions. Patient revenues will thus become a much less reliable source of funding for training and research. It is likely that these other issues will have to be explicitly addressed as options for change in the medicare program are considered.

V. SUMMARY AND CONCLUSIONS

With the implementation of the prospective payment system by medicare, the Nation has embarked on a national experiment in hospital reimbursement. In order for hospitals to survive, major changes will have to be made in the internal administrative systems, in the way decisions are made and in the relationships between trustees, administrators, and physicians.

Since the system is new it is important to let it evolve. However, certain features of PPS should be modified in the short run in order to sustain it in the long run. The phase-in period should be lengthened; better factor price information at the local level should be collected; the current adjustment for indirect teaching costs should be reduced, but an adjustment for the level of uncovered care provided by a hospital added. Research on refining the basis of payment (the DRG) and the method for determining the payment rates should be encouraged and funded.

The health care system in general and the hospital industry in particular will respond to the PPS. As lengths of stay decrease and hospital occupancy rates fall, some hospitals will close wings and others may close completely. It is easy to predict that there will be great outcries that the quality of care has diminished and that the practice of medicine is being interfered with. It is, therefore, important that the PRO's monitor the quality of care. It is, however, essential to recognize that the system is designed to reduce inputs and to alter current practices that have developed in response to open-ended systems. Thus outcome measures of quality, unrelated to treatment patterns, will have to be defined. Members of Congress will be under tremendous pressure to ameliorate the situation—a pressure which should be by and large resisted.

Although I have argued that the DRG system should be allowed to evolve, it is possible that it will collapse.²⁹ In that case two alternatives should be considered: (1) a simple payment rate per case, initially based on the hospital's own base costs and increased by the market basket with a gross case-mix adjustment at final settlement could be set, or (2) preferred provider arrangements with certain hospitals to provide services to medicare beneficiaries could be developed—a policy that would require modifying the freedom of choice provisions in the medicare law.

As noted earlier, PPS is a pricing policy: it controls the price of only one input (acute hospital care) that goes into patient treatment. Given the increase in the cost in medicare, pricing policies will no doubt be developed for all other services. Utilization review

²⁹ At a meeting of the Office of Technology Assessment's Advisory panel on medical technology and the costs of the medicare program, one prominent panel member made a bet with another member that the DRG system would collapse. The first panel member was willing to give better than even odds to back up his certainty.

activities will have to be strengthened in order to control the quantity of services used and their mix. However, as the number of alternative sites and providers multiply (as they seem to be doing), the decisions that HCFA has to make will increase exponentially.

This dynamic leads me to conclude that the delivery of medical services to the medicare beneficiaries will have to be managed. Federal regulations are one method of management, but they are likely to be rigid and not sensitive to regional or local concerns. They also promote the development of institutions that are responsive to reimbursement policies as opposed to real costs. In addition, prior experience suggests that regulations have not been effective. Thus it is important to promote the development of alternative systems of care in which organizations at risk are responsible for providing services for medicare beneficiaries. With the exception of the price of acute hospital care, which may still have to be controlled, pricing policies with respect to other providers can be left to the private sector. The HMO strategy is one such strategy, preferred provider arrangements is another, the gatekeeper is a third and putting areas up for bid for management by the contractor is yet another. The growth of managed systems, however, is the topic of another paper and more HCFA demonstrations.

These are two implications of the recent changes that are taking place in the health care sector that will have to be addressed by the legislators. The first is the effect of the tightening of hospital payment levels on the hospitals ability to finance uncompensated care. The second is the likely effect of growth of alternative delivery systems and competition on the ability of teaching hospitals to continue to support the training of interns and residents and research out of patient revenues. As the future of hospital payment policy under medicare is being debated, so too must the Federal role in funding uncompensated care and research and training be discussed.

COMMENTS ON "HOSPITAL PAYMENT UNDER MEDICARE"

(By BRUCE C. VLADECK, *The United Hospital Fund, New York, N.Y.*)

Medicare has just embarked on the most far-reaching changes since its inception, in the implementation of the new DRG-based prospective payment system, and the principal point in Dr. Lave's excellent and thoughtful paper on "Hospital Payment Under Medicare" is that it would probably be prudent to wait a little while to see what happens before contemplating major changes in that system. I heartily agree. Moreover, as Dr. Lave notes, the new system, already in place, is projected to save the hospital insurance trust fund \$6.8 billion dollars over the next 3 years. While that may only postpone the insolvency of the trust fund by one year, \$6.8 billion is still a substantial piece of change, and one wonders how much more savings can reasonably be expected from changes in payment methods for one class of providers.

Nonetheless, as Dr. Lave points out, there are some relatively short-term concerns about the new system which need to be addressed sooner rather than later. Further, there are some more basic underlying conceptual and economic issues that can appropriately be addressed at this point. These comments will touch on a number of these issues, beginning first with those that are most immediate and most technical, moving through what might be called an intermediate level, and concluding with some broader conceptual discussion.

TECHNICAL ISSUES

National rate

The plan to establish uniform national DRG's by 1986 strikes me as a triumph of conceptual neatness over sound policy. Dr. Lave's technical objections to uniform national rates are all compelling and on point, but she slights an at least equally telling criticism: Movement to uniform national rates produces no net savings to the trust fund whatsoever. For every hospital or group of hospitals that is severely and unfairly penalized by the inherent arbitrariness of a single national standard, there is a symmetrical hospital or group of hospitals that receives an unmerited windfall. A uniform national standard of efficient and effective production of care is certainly needed in the determination of medicare payment rates, but to make that standard the sole basis for the rates, in light of the enormous variations in cost patterns from one part of the country to another, reflects a preference for abstract principle over simple equity or even common sense.

Dr. Lave recommends that the movement toward uniform national rates be delayed until substantially better data is available

on actual input cost variations from one region to another. I would go a step further. Since no system of price-setting can ever be perfect, the prudent and equitable thing to do is to always continue to base at least a reasonable portion of any hospital's payment rates on its historic cost patterns. In New Jersey, a relatively complex formula has produced a pattern in which each hospital's rate for any given DRG is based roughly 50 percent on a uniform standard, and roughly 50 percent on the hospital's own historical cost experience, and that seems to be a reasonable approach.

Volume variability

Dr. Lave legitimately raises a number of questions about the incentives in DRG-based payment systems to encourage marginally necessary or unnecessary admissions and readmissions. In addition to raising questions about the integrity of the system, those incentives also threaten the expected savings. Rather than establishing low length-of-stay outliers as a partial solution to this problem, or devolving all of the responsibility to PRO's, it would make much more sense, I think, to develop an explicit volume variability adjustment in the medicare prospective payment system.

All forms of hospital payment suffer from the significant discrepancy between average and marginal cost in hospital services, but the greater the level of aggregation in the payment unit, the more pronounced that effect becomes. Paying by the case can create substantial windfalls to institutions with marginal increases in the volume of admissions, while similarly creating excessive revenue losses for those with relatively small admissions declines. The application of appropriate volume adjustments in prospective payment systems is technically straightforward and relatively simple, supported by sound precedent from state rate setting systems, and rooted directly in the economics of the problem to which it responds.

Technology

The rate of adoption of new technologies in hospital services is obviously a central concern, but there is very little empirical evidence on which to base any substantial faith in either formal technology assessment procedures or the ability of organizations like the PRO's to adequately address this concern. One only partial solution, but a very effective one, is to include the portion of hospital capital costs related to moveable equipment (which automatically encompasses most new diagnostic technologies as well as many new therapeutic technologies) into per-case DRG rates. As has been the experience on New Jersey, hospitals under such a system have an automatic incentive to adopt those new technologies which increase productivity, in the sense of reducing total costs for caring for patients within a specific DRG. The problem of technologies which produce a qualitatively superior outcome while increasing the costs of care remains, but that is a smaller problem than trying to address all new technologies.

In passing, while on the subject of capital, I need to register personal alarm at the notion of any sort of formula add-on for capital, even if only plant capital. Dr. Lave's suggestions that states be permitted to pool such funds, and that costs incurred prior to the de-

velopment of new capital reimbursement mechanisms be grandfathered, do not completely allay those concerns. A full consideration of this issue is outside the scope of this discussion, but the flat add-on strikes me as a simple solution to a very complicated problem, and thus probably an inadequate one.¹

PRO's

Dr. Lave is absolutely correct in emphasizing the critically important role of PRO's in quality assurance under a DRG-based prospective payment system. While the incentives to underprovide services are much stronger in a DRG-based system than in cost-based reimbursement, however, the quality of services being rendered to medicare beneficiaries has always been a legitimate concern of the program. DRG's, in other words, do not create the problem of a need for quality assurance. They only put it in somewhat different forms.

In this regard, the track record of a professional peer review is less than entirely encouraging. On the other hand, it was the explicit objective of many of those who were involved in the early development of DRG-based reimbursement systems to develop a methodology and a "common language" which would permit more sophisticated and effective focusing of quality assurance activities on important issues. There are a number of ways in which DRG's are inherently useful for quality assurance purposes—in some sense, after all, that's what they were created for.

Rate of increase

The greatest policy breakthrough, it seems to me, in the last years' evolution of medicare prospective payment is not so much the adoption of DRG's but the notion of "budget neutrality." For the first time, there exists the statutory authority, as well as the necessary technical tools, for the Secretary of Health and Human Services to establish, at the beginning of the year, within reasonable bounds of estimation (especially if a volume variability adjustment is added to the system), the total medicare liability for inpatient hospital services for the coming year. In order to do so, she need only determine one number—the allowable inflation rate for the medicare average cost per case.

Dr. Lave quite correctly points out that the real savings from prospective payment systems arise not from the reallocation of revenues among hospitals, but from reductions in rate of growth of overall hospital inflation. She is also correct in noting that an inflation rate of input prices plus one is substantially more stringent than anything within memory the hospital industry has been forced to encounter. It is, as she also notes, substantially less inflation than even the most optimistic private payers might hope to achieve.

At the same time, however, the pattern Dr. Lave notes in which the medical basket has increased faster than general inflation suggests that the absence of price constraints has obviated, in the hospital industry, the incentives other industries have long had to

¹ Cf. Gerard Anderson and Paul B. Ginsburg, "Prospective Capital Payment to Hospitals," 2 *Health Affairs* (fall, 1983), pp. 62-63.

change their input factor mix in response to differential price increases across types of inputs. More importantly, there is at least some precedent for the legislative enactment of a lower rate of increase. The Massachusetts rate-setting law is predicated on a growth rate over a 3-year period of input prices less 1.6 percent per year. The notion there, which is clearly defensible conceptually, is that we should be able to expect productivity improvements in the hospital industry.

It is also important to note that the CBO estimates that a rate of increase in hospital prices of input price minus 1.6 percent per year would keep the trust fund solvent indefinitely, without any further changes in the program.² We undoubtedly should wait and see what happens over the first 3 years of medicare DRG's in terms of the effects of input prices plus one, but there is no need to be wedded to that target forever.

INTERMEDIATE ISSUES

State systems

Dr. Lave takes two positions that are logically consistent but not, I believe, practically compatible. She contends that the Federal Government should remain neutral toward alternative State systems, and should not encourage the development of all-payer systems, but she expresses concern about the problem of uncompensated care, suggesting that perhaps medicare should begin to recognize an explicit subsidy for part of the burden incurred by hospitals treating uninsured and indigent patients. As a practical matter, however, the only proven existing method that appears to be politically and practically feasible in the near future to adequately address the problems of uncompensated care and the needs of the hospitals that serve substantial numbers of indigents is the implementation of all-payer State rate-setting systems with explicit uncompensated care subsidies. Such subsidies are obviously imperfect, applying as they do only to hospital-based services. Broader insurance entitlements would be preferable from the standpoint both of economic theory and sound policy. But it is very unlikely that we will have either such expanded entitlements or explicit medicare subsidies for uncompensated care in the near future.

State-run all-payer systems have demonstrated the ability to solve at least a piece of the uncompensated care problem while saving medicare as much money as its prospective payment system will. The problems of financially distressed institutions, especially in our inner cities, cannot wait for long-term solutions, and thus it seems to me the State option needs to be much more aggressively promoted.

Teaching costs

Indirect and hidden subsidies are never popular among economists or policy theorists, but they may not be such a bad way to do business. One can certainly make a practical, if not theoretical case

² U.S. Senate, Special Committee on Aging, "Prospects for Medicare's Hospital Insurance Trust Fund," S. Print 98-17, March 1983, p. 8.

for the maintenance of some level of subsidization for graduate medical education in medicare payment rates.

I agree with Dr. Lave that the subsidy now contained in the medicare prospective payment system is almost certainly too large, but I fear the suggestion that it be reduced by eliminating the indirect teaching cost adjustment from routine cases would be counter-productive.

There is a rather subtle technical issue involved here. While teaching hospitals seem particularly concerned about the problem of intensity within DRG's, on the notion that within any given DRG they probably treat the sicker cases, in my own view that presents much less of a fiscal threat to teaching hospitals than what might be called the rate compression problem. Essentially, the rate compression problem is that, because of the way costs, especially nursing and overhead costs in ancillary departments, are allocated in all existing payment systems, there is a systematic overpricing of routine cases and underpricing of complex ones. To put the same proposition another way, the range of relative case-mix rates contained in the medicare DRG system is too narrow because of a series of accounting artifacts. As a result, simple cases subsidize complex ones. To remove the indirect teaching adjustment from simple cases would be to remove that subsidy, and thus leave the adjustment only for underpriced complex cases. That would be likely to have a particularly baleful effect on major teaching institutions.

Consolidation of parts A and B

There appears to be a growing consensus that merging parts A and B of medicare, certainly on the benefit side if not immediately on the financing side, makes both administrative and policy sense. Among other things, such a merger (preferably in conjunction with some benefit design) would remove existing incentives for the unbundling of what are now hospital-based services. We need to go one step further, however. As long as we are merging parts A and B, we should address the fact that, contrary to the undoubtedly sincere public statements of its administrators, medicare already is very much a long term care program. It pays substantial costs for long term care for patients in acute hospitals awaiting nursing home placement, admitted to hospitals from nursing homes, or receiving physician or other services in the long-term care setting, as well as the explicitly-recognized long-term care costs in skilled nursing facilities and home health agencies. Conversely, medicaid has become the de facto catastrophic insurance arm of medicare, at least for long-term care clients.

Dr. Lave is undoubtedly correct in predicting that DRG-based medicare reimbursement will increase pressures to discharge relatively sicker patients from the acute setting to long-term care settings. What needs to be recognized, however, is that such patients, and in the long term the medicare system financially as well as programmatically, are much better served by a further integration of the acute and long-term care sectors than by the maintenance of rigid, arbitrary boundaries between them. The details, again, are

necessarily outside the scope of this discussion, but the issue cannot be wished away.³

SOME CONCEPTUAL CONCERNS

When all is said and done, however much the medicare prospective payment system meets its objectives, or can be improved to meet them, it is unlikely by itself to save enough money to preserve the solvency of the trust fund. As Dr. Lave quite correctly notes, it is concerned only with the setting of prices, while the volume and mix of services remain relatively uncontrolled. Total outlays, of course, are the product of price times volume, and even if the technical correction of a volume variability factor is added to medicare prospective payment, the problem of getting an appropriate handle on the volume of services rendered to medicare beneficiaries remains.

Dr. Lave contends that there are essentially two possible approaches to the volume issue. One is increased cost-sharing. The second is development of more capitated or managed care systems. I believe she is correct in contending that increased cost-sharing is not politically feasible, although it must be recognized that it is not politically feasible precisely because it is punitive toward those who are sickest and most in need.

Conversely, there is no one who opposes in principle the greater extension of capitation-based or managed systems in medicare. It is hard to be against them. But I would also suggest that there are only limited grounds for optimism about their ability ever to meet the needs of a significant proportion of medicare beneficiaries.

Effective prepaid capitated systems, such as the best group-model HMO's, address both qualitative and financial concerns, where they exist, when they work, and when you can get people to enroll in them. But it is awfully hard to effectively develop and operate a well-managed medical care system. Larry Brown has eloquently and exhaustively documented the effect of those difficulties on the impact of the Federal HMO Act.⁴ Moreover, it appears to be surprisingly difficult to get people who have decent insurance for fee-for-service care to enroll in prepaid systems. The only way to insure that a large proportion of beneficiaries will enroll in such systems is to require them to do so, but the recent experience with medicaid recipients in Massachusetts and New York suggests that may not be very feasible politically either.⁵ If Governments in New York and Massachusetts are unwilling to accept mandatory enrollment for the welfare poor, just think how much harder it will be to achieve an analogous political decision for the empowered elderly.

We cannot, in short, put all our chips on prepaid systems as the approach to the problem of getting an adequate handle on the volume of services. It will be necessary to try many additional approaches as well. Let me suggest just a few among many.

³ Cf. Bruce C. Vladeck, "Two Steps Forward, One Back: The Changing Agenda of Long Term Care Reform," *PRIDE Institute Journal of Long Term Home Health Care* (summer 1983), pp. 1-7.

⁴ Lawrence D. Brown, "Politics and Health Care Organization: HMO's as Federal Policy," (Washington: Brookings Institution), 1983.

⁵ John Iglehart, "Medicaid in Transition," *809 New England Journal of Medicine* (Oct. 6, 1983), pp. 868-872.

Since we are going to need to find a way to make PRO's work in terms of quality assurance, we might as well, in the process, see what they can do in terms of utilization review. From a narrow technical level, the technology is already well in hand. In the past, what has been lacking is the political and administrative will, but the balance of forces has certainly been changing, and here I would find some grounds for optimism.

There is also a need to play with more directly financial approaches other than capitation. There are promising experiments in regional or state-wide budget caps for inpatient services, and these need to be further developed and explored.

There is also increasing reason to believe that changes in the relative prices paid physicians for different sorts of services might have a beneficial effect on utilization patterns even in the absence of adequate administrative controls. Finally, the broader issue of the way in which physicians are paid, even in the absence of formal management systems, would seem to hold some significant promise relative to these utilization issues.

Again, this is not to say that we should not encourage as much enrollment in sound and well-managed capitated plans as is obtainable. It is only to caution that there may not be that much that is in fact obtainable, and that the utilization issue will need to be addressed on many fronts simultaneously.

CONCLUSION

To make a statement that is at once both obvious and somewhat presumptuous, prospective payment of hospitals is the only policy tool currently available for addressing the medicare financing problem with a demonstrated track record of success within the American health care system. That is undoubtedly why it is the only one that has so far been formally adopted as part of medicare legislation. As a means of controlling expenditures, prospective payment can work. Just how well it works tends to depend on a number of relatively specific and often technically complex factors, which have been the primary focus of this discussion.

But even if prospective payment, in any of a number of forms, can achieve significant savings, the ultimate issue must always be not the economic side of the equation but the implications for what actually happens to actual medicare beneficiaries in need of medical services. Here, it is important to remember the aspirations, if not yet the demonstrated performance, that lie at the root of the development of DRG-based payment. As opposed to any other currently available methods for prospective price setting for hospitals, DRG's focus, at one and the same time, both on the specific issue of hospital productivity for clinically defined products, and on the identification and scrutiny of the patterns of care being rendered to individual institutions. In other words, what DRG's are all about is finding a mix of services that, in the inevitable statutory phraseology, are both efficient and effective. That is an aspiration that extends far beyond fiscal solvency. If it succeeds, then it will succeed at addressing some of the broadest and most basic concerns of medicare, not just its potentially transient fiscal problems.

PHYSICIAN REIMBURSEMENT UNDER MEDICARE: AN OVERVIEW AND A PROPOSAL FOR AREA-WIDE PHYSICIAN INCENTIVES

(By PETER D. FOX, *Lewin and Associates, Inc.*)

I. INTRODUCTION ¹

Discussions regarding ways of controlling medicare costs have focused most heavily on hospital services, despite the fact that expenditures for physician services have, for several reasons, risen at a faster rate (see table 1). First, hospital services represent the largest expense item. Second, the impression is widespread that they, rather than physician services, have increased the most rapidly. Third, the data base is better, and it is easier to define an episode of inpatient care than one of outpatient care. Finally, there is greater potential for hurting beneficiaries if ill-considered physician reimbursement changes are made. Few hospitals could survive financially without medicare, whereas many doctors could. Also, unlike physicians, hospitals are precluded from billing patients over the amount that medicare recognizes as reasonable.

TABLE 1—MEDICARE BENEFIT PAYMENTS, 1977-81

(Dollars in millions)

	1977	1981	Annually compounded growth rate (percent)
Part A:			
Inpatient hospital.....	\$14,150	\$26,421	16.9
Home health.....	255	666	27.1
Skilled nursing facility.....	315	383	5.0
Total, part A.....	14,720	27,470	16.9
Part B:			
Physicians.....	4,751	8,948	17.1
Outpatient hospital.....	767	1,703	22.1
Independent laboratory.....	68	154	22.7
Home health.....	105	148	9.0
All others.....	490	1,168	24.3
Service category unknown.....	10	65	59.7
Total, part B.....	6,191	12,186	18.4

Source: "HCFA Program Statistics," Health Care Financing Review, IV, No. 4 (Summer 1983), pp. 115, 117.

¹The author has benefited from the comments of George Schieber, Director, Office of Policy Analysis, Health Care Financing Administration, and Jack Hadley, senior research associate, Urban Institute.

Yet, there are strong reasons for focusing on physicians from a cost perspective. Expenditures for physician services are expensive in their own right and are growing rapidly, mostly due to changes in utilization and practice patterns rather than because of increases in medicare payment levels for individual items of service. The increase in per capita expenditures, adjusted for the physician component of the CPI and the impact of fee screens, amounted to between 3 percent and 4 percent annually between 1975 and 1979 and averaged 7.3 percent annually in 1980 and 1981.² These percentages reflect principally increased utilization and intensity. Second, physicians play a substantial role in determining the utilization of both the services they provide and those provided by others, such as hospitals, home health agencies, skilled nursing facilities (SNF's), and outpatient laboratories. Thus, no cost containment strategy is complete, or even terribly effective, if it ignores physician behavior.

Federal legislation enacted in the last 2 years included provisions that affect physician behavior, but not in a comprehensive manner. Most notably, the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) and the Social Security Amendments of 1983 authorized the setting of payment levels to hospitals on a per admission, or per case, basis. The greatest opportunity for hospitals to reduce per case costs under the new prospective payment system is to assure that the attending physicians are prudent in their prescribing of ancillary services and in the lengths of stay they generate. Thus, the new prospective payment system creates pressures for hospitals to influence doctors' behavior.

On the other hand, the new system also creates pressures that can result in these savings being partially offset. Although hospitals have always had incentives to increase admissions, these are enhanced by the additional net revenues that each admission generates, particularly in the case of patients within a diagnosis related group (DRG) who are not severely ill. For example, shifting from ambulatory to inpatient surgery can be highly remunerative. The new system also generates incentives for hospitals to order services that facilitate early discharge (e.g., high technology in the home, SNF's, and home health) but that do not necessarily reduce total

² "1983 Annual Report of the Board of Trustees of the Federal Supplementary Medical Insurance Trust Fund." (Communication from the Board of Trustees, Federal Supplementary Medical Insurance Trust Fund, June 1983.)

costs. Thus, the prospective payment system by itself is an incomplete strategy.

Another significant TEFRA provision allows the Health Care Financing Administration (HCFA) to enter into new forms of risk contracts with health maintenance organizations (HMO's) and other so-called competitive medical plans. In effect, the act created a voucher system by paying the plans on behalf of beneficiaries who join an amount equal to 95 percent of average adjusted per capita costs, which is an estimate of what costs would have been had the beneficiary remained in the fee-for-service system. However, since enrollment is voluntary and payment is tied to a free-floating fee-for-service system, the approach is, again, incomplete.³

These and most other changes being seriously debated do not comprehensively address ways of bringing about changes in physician behavior within the context of the fee-for-service system, which is likely to be the predominant delivery mode for the foreseeable future. Thus, other reforms warrant consideration. The next section of this paper summarizes problems with physician reimbursement under medicare and discusses some of the solutions that have been suggested. The section after that presents a proposal for area-wide physician incentives, which are designed to alter the practice patterns of fee-for-service physicians.

THE CURRENT MEDICARE REIMBURSEMENT SYSTEM: PROBLEMS AND PREVIOUSLY SUGGESTED SOLUTIONS

The medicare program reimburses physicians on the basis of the customary, prevailing, and reasonable charge method. This method is essentially identical to what is referred to as usual, customary, and reasonable (UCR) reimbursement for private coverage. Under this approach, physicians are paid what medicare judges to be reasonable charges, which is defined by statute as the lesser of: the individual physician's actual billed charge; the amount that he or she customarily charges for that procedure, defined as the median of actual charges; and the prevailing charge in the community, defined as the 75th percentile of customary charges within a given locality.

An important characteristic of the charge screens is that they are updated each July for the following 12 months based on data from the prior calendar year. The failure to update more frequently creates lags in recognizing increases in physician fees in private markets. However, until a few years ago medicare payment levels were probably not substantially below private markets. Sloan et al. reported in 1977 that, each of seven procedures analyzed, medicare fees averaged at least 92 percent of the best Blue Shield plans in their respective areas, and medicare and Blue Shield fees combined averaged 75 to 80 percent of what physicians report as their usual charge.⁴

³ Some proponents of procompetitive approaches believe that, as these prepaid plans attract enrollment, the residual fee-for-service system will be induced to discipline itself as a competitive reaction. However, this theory is at best untested. A mandatory voucher approach might be more likely to achieve this result. However, it raises other problems and is beyond the scope of this paper.

⁴ F. Sloan, J. Cromwell, and J. Mitchell, "A Study of Administrative Costs in Physicians' Offices" (Abt Associates, 1977), quoted in Ira Burney and Jon Gabel, "Reimbursement Patterns

Continued

Increases in medicare payment levels were restrained further in 1972 when the social security amendments limited the rates of increase in the prevailing screens to an index that reflects inflation, referred to as the economic index, using fiscal year 1973 as the base year. The economic index is a weighted average of the cost of office practice and wage rates in the economy as a whole. Since physician fees have historically increased more rapidly than the economic index, an important and insufficiently appreciated consequence is that the reimbursement system is gradually changing from one that reflects the distribution of charges in the community to a fee schedule. Importantly, the emerging fee schedule rigidly maintains the ratios among fees (e.g., among specific procedures, specialties, and geographic areas) that were in effect in 1972. Thus, the program has no mechanism to make adjustments as procedures become relatively more or less costly in relation to one another.

The current system has a number of problems. The more services the physician provides, the greater resulting income. Thus, it encourages the provision of services that may be marginally necessary or completely unnecessary. It is also highly inflationary. Although the economic index was intended to provide a measure of restraint, it only limits what medicare will pay for individual items of service and leaves utilization unrestrained. Indeed, one of the problems of fees restraints alone is that they can induce increased utilization, although there is debate regarding the extent of this effect.⁶ Finally, it tends to reward high technology and procedural medicine over hands-on care (particularly primary care) and pays at higher levels in urban than rural area than are justified by cost of living or other differentials that should be reflected.

To be sure, these problems are not unique to medicare. In particular, the incentives to increase volume are inherent in UCR method of reimbursement of private insurance, and the inflationary impacts are due to the combined effects of public and private payment mechanisms, not to medicare alone.

Two other problems also characterize the medicare physician payment system. First, it is confusing to beneficiaries and providers alike, since, commonly, neither knows the payment level in advance of the bill being submitted for reimbursement. Second, the billing mechanism has been problematic. Physicians decide on a claim-by-claim basis whether to bill the medicare carrier or the patient. If they bill the carrier, they agree to accept the medicare-determined reasonable charge level as payment in full. This is known as accepting assignment. Alternatively, physicians can bill beneficiaries directly for any amount, and the beneficiary is financially liable to the physician for the difference between billed charges and medicare-determined reasonable charges. This liability is in addition to the regular medicare cost sharing. One consequence of the physician's right to bill the patient for unassigned claims is that a high proportion of the budgetary savings that result from the economic index are achieved at the expense of the beneficiary rather

under Medicare and Medicaid." in Jon Gabel, et al., eds., *Physicians and Financial Incentives* (Department and Human Services, Health Care Financing Administration, 1980.)

⁶ See, for example, Jack Hadley, John Holahan, and William Scanlon, "Can Fee-for-Service Reimbursement Coexist With Demand Creation?" *Inquiry*, vol. 16 (fall 1979), pp. 247-258.

than from fee increases being restrained. This is demonstrated in table 2, which shows the rate of charge disallowances due to the fee screens increasing from 12.2 percent in 1973 to 23.7 percent in 1982, a significant increase in beneficiary cost sharing. (Table 2 also displays the net assignment rate, which has remained surprisingly stable.)

TABLE 2.—NET ASSIGNMENT AND CHARGE REDUCTION RATES 1973-82

(In percent)

Calendar year:	Net assignment rate ¹	Net charge reduction rate
1973.....	52.7	12.2
1974.....	51.9	14.4
1975.....	51.8	17.4
1976.....	50.5	19.5
1977.....	50.5	19.0
1978.....	50.6	19.3
1979.....	51.3	20.8
1980.....	51.5	22.4
1981.....	52.3	23.5
1982.....	53.0	23.7

¹ Net of certain hospital-based physician billings.

Source: HCFA/Bureau of Data Management and Strategy.

Reflecting these problems, a variety of physician reimbursement reforms have been debated, albeit less extensively than potential hospital reimbursement changes. The explicit creation of a fee schedule has been advocated for a number of reasons. It would be more understandable to both beneficiaries and physicians. In addition, proponents hope that it would reduce existing biases that favor inpatient over outpatient care and procedural medicine over hands-on care. Whether it would in fact do so would depend on the process and politics whereby the fee schedule was set initially and periodically revised over time. One interesting and encouraging note is that two separate organizations of physicians that each formed preferred provider organizations in Denver needed to develop fee schedules; in both instances, a conscious decision was reached to favor primary care physicians.⁶ Proponents also hope that fee schedules would also narrow urban-rural differentials. However, payment levels that are out-of-line with community norms raise problems, since only about 41 percent of medicare bills not involving medicaid are assigned.⁷ Payment levels that exceed

⁶ Peter D. Fox and Eilse J. Tell, "Private Sector Health Care Initiatives: A Case Study of the Denver Area" (Washington, D.C., Lewin and Associates, 1989.)

⁷ Derived from internal CBO memo, which in turn is based on summaries of patient bills submitted in 1980. CBO, using HCFA data, reports that 51.0 percent of bills are assigned, of which 10.5 percent are for joint medicare-medicaid eligibles and 36.5 percent are for those only eligible for medicare. The 41 percent is derived by dividing 36.5 percent by 89.5 percent, thereby removing joint eligibles from both the numerator and the denominator. This percent has, presumably dropped slightly since 1980.

community norms can result in higher incomes to physicians with only marginal effect on behavior, and low ones leave the patient holding the financial bag.

Another approach is a physician-DRG system that would reimburse physicians at a preset rate for each patient in a given diagnosis-related category. Such an approach—which is really an aggregated fee schedule—would probably be realistic only for hospitalized patients, since determining the end-point of a spell of illness for a nonhospitalized patient is difficult.

Independent of changes in the setting of payment levels, the approach to assignment could be changed. One proposal would mandate assignment, thereby precluding physicians from billing over the medicare-recognized level. Mandated assignment would result in some physicians limiting their medicare practices, although I suspect far less than would be indicated by the 59 percent of claims not involving medicaid that are unassigned. Another approach would be to offer physicians the opportunity to sign participation agreements, but without mandating assignment. Those who did would agree to accept assignment for all patients; the remainder would not be allowed to accept assignment, except for joint medicare-medicoid eligibles, and thus would consistently bill the patient. Mitchell and Cromwell, based on a survey, report that two-thirds of physicians, faced with an all-or-nothing decision, say that they would not accept assignment, representing a decrease in the percent of assigned visits of 11 percent for general practitioners and 12-25 percent for general surgeons, internists and obstetricians/gynecologists.⁶ Other approaches that have been suggested include mandatory assignment on large bills, inpatient physician bills, and/or bills for services, such as selected ophthalmic procedures, that are performed principally on the elderly.

Finally, measure have been proposed to help beneficiaries better understand medicare reimbursement and promote access to price information. For example, posting of physician fees could be mandated, and physician assignment rates publicized.

AREA-WIDE INCENTIVES ⁷

All of these changes warrant serious discussion. However, none address the underlying problem of the blank check mentality associated with the incentives embodied in the fee-for-service system as it now operates, particularly those to increase the volume of services. Thus, a new approach is proposed that entails a system of area-wide physician incentives. This approach is not mutually exclusive with either the cost containment provisions now in title XVIII or with most proposals that are being seriously considered. Examples of such proposals include expanding the voluntary

⁶Janet B. Mitchell and Jerry Cromwell, "Impact of an All-or-Nothing Assignment Requirement under Medicare," *Health Care Financing Review*, vol. 4 (summer 1983), pp. 69-78. Whether physicians would, in fact, behave in this manner is conjectural. Furthermore, some who advocate all-or-nothing assignment argue that it would reduce beneficiary confusion.

⁷In 1979, in my capacity as Director of the HCFA Office of Policy Analysis, I proposed this approach to then-Administrator Leonard D. Schaeffer. Subsequently, HCFA's Office of Research and Demonstration staff performed analyses on the topic and prepared a Request for Proposal (RFP) for demonstrations. In 1981, for whatever reason, a decision was made not to issue the RFP. In preparing this paper I have benefited from reviewing some of the HCFA documents from that time.

voucher system now in law or limiting the amount of employer contributions to health benefits that are exempt from the personal income tax. Indeed, the proposal is premised on the belief that a multifaceted strategy that relies on a combination of consumer incentives, provider incentives, and Government appropriately using its purchasing power will have greater impact than any unidimensional approach.

The proposal reflect three assumptions. First, fee-for-service will continue to be the primary mode of delivery for the foreseeable future. Second, in order to moderate significantly the large medicare trust fund deficits that are anticipated without reducing benefits or increasing revenues,¹⁰ it is essential to address physician practice patterns. Third, long-established patterns of physician attitude and behavior can best be altered through changes in underlying incentives. Less than efficient medicine is not the result of fraud, abuse, or bad intentions. Rather, it is the consequence of the third party payment mechanisms, both public and private, that have evolved over time.

Area-wide incentives would begin to alter these incentives. The key steps in structuring them are conceptually straightforward:

Reasonable market areas would be designated.

Targets for total medicare expenditures (parts A and B) within each market area would be established prospectively.

After the end of the time period in question (assumed herein to be a year), actual expenditures would be determined, and the variance—that is, the difference between targeted and actual expenditures—would be calculated.

Physicians would be rewarded or penalized depending on whether there was a positive variance (actual expenditures less than target) or a negative variance (actual expenditures more than target).¹¹

The major advantage of this approach is that it would entail a fundamental change in incentives within the fee-for-service structure that would be comprehensive in scope, that is, it would encompass all medicare-covered services rather than just a single service, such as hospital or physician. Importantly, although one would anticipate that changes in physician organization would occur, these would evolve as a consequence of the change in incentives rather than being mandated, as the Federal Government now does through the professional review organization (PRO) program, which is being implemented as a successor to the PSRO program. In the long run, physicians will be encouraged to promote community efforts to reduce excess hospital capacity and to be less aggressive in promoting capital expenditures that increase costs. Finally, as described below, the targets can be adjusted to reduce the enormous disparities across geographic areas in expenditures per beneficiary that now exist and that raise severe equity issues.

A fundamental difference between area-wide incentives and health maintenance organizations or other voucher systems should

¹⁰ Congressional Budget Office, "Changing the Structure of Medicare Benefits: Issues and Options" (March 1983).

¹¹ A positive variance can be viewed as a savings relative to the target, and a negative variance a loss.

be noted. HMO's entail the provision of services to a voluntarily enrolled population, and no physician is required to work for the HMO. In contrast, the basic unit of the area-wide incentive system would be a geographically defined population. Importantly, the only way physicians could exclude an abusing or inefficient colleague is by influencing their practice patterns, having them removed from the program, or otherwise disciplining them. Thus, the approach is not a procompetitive one as the term is generally used, but neither is it fundamentally regulatory in nature.

In designing the area-wide incentive program, a variety of issues will have to be confronted, including:

- The target level;
- The reward and penalty structure;
- The formula for distributing bonuses and penalties to individual physicians;
- The availability of data;
- The designation of geographic boundaries within which the targets are set;
- The problem of patient out-of-area coverage; and
- The locus of administration within each area.

The target level

The setting of the target will be all-important to the physicians affected, because its level determines the amount of the reward or penalty. A reasonable initial approach is to use historical rates of increase in expenditures, adjusted for changes in overall rates of inflation and in the number and age composition of beneficiaries within the area. Thus, the target would intentionally not be difficult to meet, and both the program and physicians can anticipate benefiting from the changes in practice patterns that the incentives are intended to generate. Historically, even after adjusting for the aging of the population, the rate of increase in medicare expenditures had been several percentage points higher than the increases in the cost of living, the gross national product, or other aggregate measure of the economy. Over time, if the area-wide incentives are successful, the differential will narrow, and this narrowing will be reflected in projections that are made in future years.

In the long run, the target need not reflect historical increases. It could, for example, be allowed to increase at a rate that reflects cost of living and demographic changes as well as a factor to reflect desired increases in intensity of services. Importantly, the year-to-year increases in the target can be used to narrow the wide geographic expenditure differentials, with low-expenditure communities being allowed a greater rate of increase than high-expenditure communities. Walter McClure, president of the Center for Policy Studies in Minneapolis, analyzed per beneficiary medicare expenditures in 26 representative SMSA's.¹² He found that in 1978 these expenditures—adjusted for age, sex, and area wages—ranged from less than \$700 in the Peoria, Tacoma, and Seattle SMSA's to \$1,574

¹² Unpublished data; private communication from Walter McClure.

in Miami. These broad ranges raise pressing issues of both efficiency and equity that area-wide incentives can begin to address.¹³

The reward/penalty structure

The most obvious reward and penalty structure would have the physicians within an area share a predetermined percent of the variance, whether positive or negative, possibly up to a maximum. Alternatively, the program could have a reward structure only, that is, physicians would receive bonuses if there was a positive variance but would not be penalized in the event of a negative variance. However, the long-term intent of the proposal is to discipline the fee-for-service system, and both rewards and penalties would seem appropriate. These need not be symmetric. For example, physicians might receive 20 percent of a positive variance (savings) but be penalized for 10 percent of a negative variance (potentially up to some predetermined maximum). In addition, some mechanism would be necessary to collect payment from physicians should a negative variance occur. Independent Practice Association (IPA) HMO's typically withhold a portion of the fees and pay it out at the end of the year if budget targets are met.

One problem with a nonsymmetric structure is the potential for an adverse budget impact due to random fluctuations. HCFA staff estimate that, currently, between 10 and 20 percent of all PSRO areas witness either a year-to-year decrease or increase in hospital utilization of 5 percent or more. In the extreme, if physicians who face a nonsymmetric incentive structure ignore the incentives altogether and do not change their practice patterns, program costs will increase as a result of random fluctuations that result in bonuses exceeding penalties.

Formula for distributing bonuses or penalties to individual physicians

One possible formula would distribute bonuses in proportion to services rendered, the approach adopted by most IPA's. Although this formula may reasonably reflect relative effort, it has the disadvantage of encouraging excess services. Thus, the financial incentives on the IPA are collective, or group, incentives that are not internalized at the level of the individual practitioner. As a result, IPA's generally find that they must achieve their cost savings primarily through administrative controls and educational efforts rather than through financial incentives for individual practitioners. Physicians in an area might also be encouraged to propose their own distribution formula.

Obtaining the data to measure variances

A generic problem in implementing new policies is the availability of data to support them. Although I have not analyzed the issue in detail, I suspect that the data problems are probably less than those required to implement: First, the new hospital prospective payment system, which requires that each hospital accurately code diagnosis, or second, the new competitive medical plan, or HMO,

¹³ Another, narrower, approach would be to vary the hospital prospective payment amounts to reflect admission rates in the community.

provisions, which require that beneficiary health status be accurately reflected in the amounts paid to participating plans. It should also be realized that an estimate of prior year performance can be made quite accurately prior to all bills or claims being submitted. An internal HCFA document describes some of data available thusly:

Inpatient hospital days of care per 1,000 medicare beneficiaries adjusted to reflect the population-at-risk (are available). This kind of data is generated on an ongoing basis for PSRO areas and can be generated for Health Service Areas (HSAs) and for counties. Furthermore, this kind of data is capable of being generated rapidly, so that the respondent can receive timely feedback regarding trends in hospital utilization.

Medicare Part A data on charges and costs can be generated. Part A costs are subject to a time lag of approximately 7 months due to the time required to calculate the reasonable costs from the submitted charges. In order to provide short-term trend information, data on Part A charges may be useful and can be generated fairly rapidly. This data is available through the HCFA Central Office.

Medicare Part B charges can be abstracted from payment records. Payment records can be retrieved through the HCFA Central Office, although they are generated on an ongoing basis by the carrier. They are subject to certain limitations. The payment record does not identify the practice site of the physician, nor does it identify all procedures. However, the payment records can be sorted based on county of residence of the beneficiary. Where areas are defined with low levels of migration, the Part B payment record can be used as a gauge of utilization and cost of ancillary services. While there is a significant time lag in obtaining 100 percent of Part B costs through payment records, three months after the close of an accounting year about 90 percent of payment records can be retrieved. Further, one can project a precise estimate of Part B costs, taking into account previous years' experience in the area in timeliness of submission of Part B claims.

Designation of geographic areas

Market areas can be difficult to define, particularly in large metropolitan areas. Not only do analytic issues arise, but also the process inevitably becomes politicized to some degree, as evidenced by the experiences of HHS in drawing boundaries for both health systems agencies under the health planning legislation and for the PSRO's. However, some large IPA's have assigned their physicians to regions in order to create management units and incentive pools that are more localized than the plan as a whole. The results have apparently been successful, even with an imperfect boundary designation process. However, even the largest IPA has fewer physicians as members than would most geographic areas under this proposal. Furthermore, the drawing of boundaries is likely to be particularly thorny if the area-wide incentives are to be adjusted to narrow some of the existing regional expenditure disparities because physicians will prefer to be in the area that is allowed the higher rate of increase.

Cross boundary flow

Inevitably, some beneficiaries will receive services outside of their areas of residence. The severity of the problem would need to be analyzed; we presume that the proportion of services received outside of the area of residence to be small, although it could be large in some communities, such as those having a high number of elderly who reside temporarily during certain seasons of the year.

Locus of administration

The question of who should implement the program in each area will need to be addressed. The most logical organization is the PRO. Alternatively, physicians could work with the medicare fiscal intermediaries, who might also share in the risk or could form their own organization independent of the PRO or the intermediary. The incentives will be in effect regardless of whether physicians cooperate, and physicians will have good reasons to work with an existing organizational structure, or form one anew, without prodding from the Federal Government.

CONCLUSION

Area-wide incentives raise two principal sets of issues relating to: One, the likelihood that the incentives will, in fact, work and two, problems of implementation and administration. Several concerns regarding the incentives can be noted. First, they are group, or collective, incentives—that is, they apply to all physicians in the area rather than reflecting the practice pattern of individual physicians—and there is no easy or obvious way of creating incentives for individuals. Second, medicare patients constitute a minority of patients of the typical physician, albeit a large minority, and there is always some question regarding whether physicians will change their behavior unless the incentives are changed for their practice as a whole. Specifically, medicare payments for physician services amounted to 17.5 percent of all payments nationally in 1981, although the number of medicare beneficiaries accounts for almost twice that percent. This percentage could be increased if the approach encompassed medicaid or even private funding. Third, physicians cannot be excluded from the program other than through existing medicare procedures that make ineligible those physicians who engage in fraudulent or abusive practices.

IPA's face the first two concerns and, again, their experience is instructive. With regard to the first concern, most IPA's do achieve savings, despite the collective nature of the incentives to individual physicians. As illustration, the 1980 National HMO Census reports that the average hospital utilization rate is 491 days of care per 1,000 enrollees for IPA's, compared with 725 for Blue Cross/Blue Shield.¹⁴ IPA's face the same problem of individualizing incentives. However, the area-wide approach would create a collective incentive on a broader scale.

With regard to the second concern, the proportion of the patients of IPA physicians who are prepaid is typically far below the proportion that are medicare-eligible, yet most IPA's are successful.

The third concern does not have a parallel in the IPA, which can remove physicians from the program. In reality, few physicians are ever removed, although the threat is always present. Thus, area-wide incentives depend heavily on peer pressure.

¹⁴ Group model HMO's had an average of 402, and staff model HMO's, 418 days of care per 1,000 enrollees. Thus, IPA's do not, achieve the same level of efficiency as group or staff model HMO's. See U.S. Department of Health and Human Services, Office of Health Maintenance Organizations, "National HMO Census of Prepaid Plans" (Washington, D.C.: U.S. Government Printing Office, 1980).

Administrative issues, some of which have already been cited, include that of boundary designation, the need to generate mechanisms for physicians to work together where such mechanisms do not already exist, the need for improved data systems, and the mechanics as well as the formula for distributing bonuses or collecting penalty payments. One important element of administrative simplicity will, however, be introduced—the Federal Government will no longer need to issue detailed regulations and instructions governing how PRO's should function. Instead, they will, for the first time, have the incentive to perform effectively.

Finally, the potential for adverse impact on the beneficiary must be considered. In theory, the beneficiary might not even know that physicians face a new set of incentives. One concern is that physicians who do not accept assignment will extra bill patients in anticipation of facing penalties. This concern, however real, must be addressed in relative rather than absolute terms, that is, whether beneficiaries would be hurt more through the proposed approach than through other measures. If current practice patterns of physicians are allowed to persist, the changes in the program are likely to be much more harmful to beneficiaries.

The approach might best be tested initially through a series of large-scale demonstrations, which would generate information on the impact and allow administrative and technical problems to be worked out. The target could be the estimated total expenditures for the subsequent year, perhaps with retrospectively calculated correction factors for certain unforeseen events, for example, inflation in the general economy being significantly higher or lower than projected. A logical place to start might be in a handful of areas with successful PRO's. The PRO's have been established specifically to assess the appropriateness of care provided medicare and medicaid beneficiaries. As such, they offer both a data base on utilization and a formal organization of physicians who are accustomed to collaborating, albeit not at the level of intensity that this proposal envisages.

The demonstrations could be conducted under current law if there were only positive incentives, that is, there were no penalties in the event the target was exceeded. For example, they might receive 20 percent of any positive variance. Restricting the demonstrations to positive incentives will induce greater physician cooperation. Alternatively, legislation could be enacted that had a phase-in period that included demonstrations.

CRITIQUE OF PETER FOX'S "PHYSICIAN REIMBURSEMENT
UNDER MEDICARE: AN OVERVIEW AND A PROPOSAL FOR
AREA-WIDE PHYSICIAN INCENTIVES"¹

(By JACK HADLEY, *The Urban Institute*)

The system of areawide incentives outlined by Dr. Fox would be a dramatic departure from medicare's current methods of paying not only physicians but also all other providers. It is just shy of a fully budgeted medicare program because the targets which would be set are not binding. Actual expenditures will still be determined primarily by the interaction between prices and use rates for individual services. If the national aggregate target is exceeded, medicare may be able to take back some money it paid physicians; if not, then it would give physicians a bonus and thus spend more than it would have otherwise. By using financial penalties and rewards as incentives, this approach tries to get physicians to be the collective managers, not just the prescribers, of all services used by medicare beneficiaries.

My comments cover the design, implementation, and administration aspects of Dr. Fox's proposal. The first question I address is whether the system's inherent incentives are likely to push or lead physicians toward greater efficiency. Second, assuming that the incentives do make sense, how feasible are the system's implementation and administration?

Dr. Fox argues that the combination of areawide targets, rewards, and penalties will induce physicians to make the medical care system more efficient, thereby saving medicare money, but without reducing benefits, either in terms of quantity or quality. Furthermore, the Federal Government would not impose, require, or mandate any particular type of organization to force physicians to change their behavior. Rather, the best approaches would evolve as a consequence of the incentives inherent in the targets, rewards, and penalties.

As Dr. Fox points out, the key to making his approach work is translating the collective incentive to reduce spending into an individual incentive to which individual physicians will respond. He believes that the fear of penalty and the prospect of reward will induce physicians to band together, to act cooperatively to limit resource use, and to monitor and police each other so that all conform.

I believe that this is likely to occur only if the potential reward or penalty is large enough to offset whatever gains the physician might attain by going it alone. For the individual, gain would in-

¹ Preparation of this paper was supported by a grant from the Ford Foundation to The Urban Institute. I would like to thank my colleagues at the Urban Institute for their helpful discussions and comments. However, I am fully responsible for the opinions expressed and they do not necessarily represent the views of the Urban Institute or its sponsors.

clude not only financial benefit but also the freedom to practice medicine without interference from an outside group. Although areawide incentives give the appearance of setting a limit and using financial incentives to change behavior, I fear that the basic structure is inconsistent with the theory and evidence of the behavior of individuals in groups.² As long as rewards and penalties are distributed among all physicians without regard to their individual behavior, the individual physician will do better by ignoring the collective incentive. Furthermore, the larger the group, the weaker the collective incentives become.

Let me give some examples. Suppose all physicians ignore the collective incentive and as a result exceed the target. For simplicity, assume that they all provide about the same number of services to medicare and that the penalty is distributed equally among physicians. Does it make sense for any individual physician or subset of physicians to reduce their services to medicare, either by cutting back on their own billings or by admitting fewer patients to the hospital? If some physicians do, their actions will reduce the size of the penalty, but by an amount far less than their own foregone income, since the aggregate reduction in the penalty is shared by all physicians. Can a subset of private physicians force other physicians to change their behavior? As I understand current anti-trust laws, the answer is no.

Let's take the opposite case and suppose that actual expenditures turn out to be lower than the target. If physicians had in fact not changed their behavior at all, then this would mean that the target had been set too high and that physicians received a windfall bonus.

But let's assume that in fact some physicians are very civic minded and consciously try to limit the services used by their medicare patients, but without affecting quality or outcome. For example, imagine that the physicians on 18th and 19th streets in the District of Columbia have a strong north-south orientation and believe in preserving the Union. They form the Numbered Streets Independent Practice Association [NSIPA] to manage their behavior and in fact succeed in cutting medicare expenditures by 10 percent, say by admitting their patients to the hospital less often.

The physicians on K Street, L Street, and the other alphabet streets are east-west confrontationists who will have nothing to do with Government targets and collective behavior. They treat their patients just as they always have, but purely by coincidence, happen to increase their medicare patients' services by just the target rate.

Location theory being what it is, there are equal numbers of physicians in NSIPA and the alphabet streets. As a result, the D.C. Reasonable Market Area's total medicare spending was 5 percent below the target. Medicare saved money, so it's time to hand out the bonuses. Dr. Fox suggested that physicians get 20 percent of the savings. If this formula were adopted, medicare would keep 4

² P. Held and U. Reinhardt, eds., "Analysis of Economic Performance in Medical Group Practices," Project Report 79-06 (Princeton, N.J.: Mathematica Policy Research, July 1979); F. Sloan, "Effects of Incentives on Physician Performance," in J. Rafferty, ed., "Health Manpower and Productivity" (Lexington, MA: Lexington Books, 1974).

out of the 5 percent and the remaining 1 percent would be divided among the physicians.

If an equal distribution rule is followed, the NSIPA physicians would collectively get one-half of 1 percent and the alphabet street physicians would get one-half of 1 percent. For the latter, of course, this is pure windfall, since they didn't do anything different. For the NSIPA physicians, the bonus is indeed a reward for civic behavior. But to get this reward, these physicians reduced their own billings, of which, on average 40 percent represents costs and 60 percent is net income. So if the 10-percent reduction in services used by their medicare patients included a 1-percent reduction in their personal billings, then on net, they come out slightly behind. Their net incomes fall by 0.6 percent because of their reduced billings, against a bonus of 0.5 percent. This does not count any of the costs or time required to set up and manage NSIPA. Based on this scenario, I would predict that many physicians would move from 19th Street to K Street.

Humor aside, I think the basic flaw in the design of the areawide incentive approach is that it lacks a mechanism for forcing individual physicians to follow the group incentives. In the absence of compulsion and as long as rewards and penalties are shared, then the individual physician will always do better by pursuing his/her personal gain. To the extent that this contributes to a deficit, then that physician's individual contribution to that deficit is spread among other physicians. Conversely, if others voluntarily curb spending, then they wind up sharing the reward with others, so that they don't reap the full benefit of their cost-conscious behavior.

Research has shown that monitoring, policing, and managing are key elements of any group's organization.³ If the group is small, say 10 or fewer physicians, then these functions can be carried out informally through peer pressure. But as group size increases much beyond this relatively small number, it is important to establish formal mechanisms for not only managing resources but also tying individual rewards and penalties to individual behavior.

Large groups can be managed. Kaiser and other large HMO's and IPA's have demonstrated this. In fairness to Dr. Fox, he recognizes the problem of imposing group incentives on individuals and cites some IPA's success as evidence that it can be done. But one of the alleged advantages of the areawide incentive plan outlined by Dr. Fox is precisely its weakness—the lack of any required organizational structure which would impose targets, rewards, and penalties on individual providers. No one has to join an IPA and the areawide incentives aren't strong enough to get them to join.

Turning to implementation and administration issues, Dr. Fox mentioned several. Two warrant some emphasis, however. First, people travel to obtain medical care. In fact, it may be that the sicker they are and the more complicated their cases, the more and the farther they are likely to travel in seeking advanced medical help. This reality makes me very skeptical about the possibility of defining "reasonable market areas" for medicare services.

³ Held and Reinhardt; Sloan.

Dr. Fox recognizes the cross-boundary flow problem, but surmises it to be small. On the contrary, evidence on people's travel patterns for ambulatory care suggests that between 10 and 50 percent of visits occur in counties other than the county of residence, depending on the size of the county of residence.⁴ For most institutionalized care, the proportion crossing county lines is likely to be even higher, especially for complex care given by teaching hospitals, which tend to be concentrated in large cities. In general, and very importantly, the reasonable market area's size increases as the nature of the service becomes more complex.

Against whose target would cross-area expenditures be charged? Whether done by area of residence or area of service, cross-boundary flow will make some medicare patients more desirable than others by virtue of where they live. For example, depending on the choice made, it could create strong incentives for physicians in suburban Maryland and Virginia to see their medicare patients in D.C., or, conversely, induce District physicians to set up medicare offices in Rosslyn, Crystal City, and Chevy Chase.

One obvious way to deal with cross-boundary flow is to make the market areas large, say an entire SMSA or large portions of States, perhaps coinciding with medicare's fiscal intermediaries' boundaries. But as the area gets larger, then so does the number of physicians. The greater the number of physicians, the weaker and more diffuse the collective incentive to reduce spending, and the greater the costs and difficulties of organizing physicians into managed groups. To give some numbers, the Washington, D.C., SMSA has 7,665 patient care physicians: D.C. has 1,795, Montgomery County 2,245, and Fairfax County 913. The New York SMSA has over 30,000 physicians. The very largest IPA may have about 1,000 physicians, and most are much smaller.

Finally, who would, or could administer this system? Dr. Fox suggests the professional review organization or the medicare fiscal intermediary. These suggestions seem to be based on the belief that it is a few outlier physicians who are overserving or overproviding care, that their excessiveness can be identified through billing patterns, and that disciplining those few physicians will solve much of the medicare expenditure problem without hurting or affecting very many beneficiaries. Recall, however, that the expenditure target for an area includes all medicare services, part A and part B. Thus, whoever administers the system will have to develop some way of collecting claims, payment, and use information for all providers, not just physicians. Furthermore, if a physician organization is responsible for administration, how is it going to change the behavior of other providers? Physicians do indeed admit patients, order tests, and write prescriptions. But they don't pay hospitals, or home health agencies, or nursing homes. Nor do they manage these organizations. They don't negotiate labor contracts, or make purchasing agreements. Thus, other than simply limiting use, it's not all clear how physicians could get other providers to be more efficient.

⁴J. Kleinman and D. Macuk, "Travel and Ambulatory Care," "Medical Care" (May 1988), p. 545.

Dr. Fox's goal in proposing the areawide incentives system was to reduce the increase in medicare spending without reducing either access or quality. The harsh truth which Congress will have to face up to is that it probably can't be done. As the current administration learned in trying to balance the budget, raise defense spending, and cut taxes, you can do any two, but not all three.

In shaping the laws which will govern the medicare program, it would be prudent to remember one of the key laws of economics: You get what you pay for, and its corollary: If you pay less, you get less. The areawide incentive system might possibly save medicare money, as long as the targets were not set too high. However, physicians would simply view the penalties as fee reductions and, in all likelihood, they would cut back on quality and/or the number of medicare patients they would be willing to see, either by limiting the number of new medicare patients or by passing the penalty on to patients in the form of higher charges, which would scale back the amount of care they would seek.

Given that choices must be made, the first and probably hardest question Congress should deal with is how much medical care is it willing to pay for on behalf of the elderly. If there were no return on the public investment in medical care, then the question would be much easier to answer. It would be clear that too much is being spent. But my own and other research suggest that on average a 10-percent increase in the use of medical care brings with it a 1- to 1.5-percent decrease in mortality rates.⁵ Mortality rates for the elderly have been declining dramatically since medicare was enacted, to the point where life expectancy at age 65 has increased much faster for Americans than for 65-year-olds in Canada and several west European countries.⁶

I certainly do not know what the answer is to the question of how much to spend. But I do know that it's an answer which is likely to change over time, as the Nation's wealth changes, as people's attitudes change, as knowledge and technical capabilities change.

I would also assert that debating the issue in terms of how many billions of dollars medicare spends, the medical care sector's share of GNP, or HCFA's share of the Federal budget is not terribly illuminating. There is nothing that is intrinsically right about health care making up 8 or 9 percent of GNP, nor is there anything intrinsically wrong about 10 or 11 percent of GNP.

Returning to the topic of this paper, if fiscal pressures dictate that medicare spend less, as it appears they do, then how should medicare pay physicians in order to get the most for its money in terms of quantity and quality and to promote acceptable levels of access for medicare beneficiaries? Note that there are two goals here, efficiency, that is, getting the most for your money, and equity, insuring that everyone gets served on acceptable terms.

This brings up another law of economics—one which was good enough to win a Nobel prize for its developer, and this obviously is

⁵ See J. Hadley, "More Medical Care, Better Health?" (Washington, D.C.: The Urban Institute Press, 1982) for a summary of this research.

⁶ D. Rogers, "The President's Statement," "The Robert Wood Johnson Foundation Annual Report 1982" (Princeton, N.J.: The Robert Wood Johnson Foundation, 1982), p. 12.

a simplification: If you have two policy objectives you need two policy tools. In other words a physician payment method alone cannot both promote efficiency and assure equity.

In terms of promoting efficiency, our economic system has developed an as yet unparalleled, highly decentralized method—the price system.

But isn't this just fee for service?

Absolutely.

But what about the blank-check mentality which Dr. Fox asserts is the hallmark of fee-for-service payment?

The problem with fee for service in medicine is not that physicians are paid for each and every service provided, but that insurers, both private and public, have imposed no discipline on fees. People confuse the method of payment with the method of determining fee levels. As many physicians who treat medicaid patients will attest, fee for service can be very stingy.

CPR and UCR, however, are indeed blank checks—because they are purely mechanistic methods of determining fee levels. Until recently, no insurer was willing to say, "The price is too high for this service, or this service isn't worth what's being charged." Rather, attempts to limit fees, like medicare's economic index, have been as mechanistic and unconscious as the fee demonstrating process itself.

If medicare is going to have to make tough decisions about how to cut spending, then it should start evaluating the specific services that physicians provide by comparing what it pays to what it thinks the service is worth. Is \$30 for a 5-minute hospital visit too high? Then pay only \$15 or \$10. Do you want to encourage people to see doctors early? Then keep the fee for an initial office visit where it is. Are too many lab tests being done, perhaps because fees are way out of line with the costs of doing tests? Then pay less for lab tests. Are there other procedures and operations which were difficult, complex, and expensive 10 years ago, but are now routine and much less expensive? Then pay less for those procedures as well.

There are two key points. First, fees should reflect not only the cost of provision but also the benefit or worth to the patient. Second, costs and benefits change and need to be continually evaluated. Individuals probably can't make these evaluations very well, nor do they have very much incentive to do so under the current system. Insurers, especially one as large as medicare, should and need to make these decisions. Formulas like CRP cannot do it.

Ideally, fees should be, in Mark Pauly's terms, fiscally neutral.⁷ This means that in deciding among alternative treatments for a patient, we want the physician's personal financial return to be the same, regardless of which treatment is chosen. We do not want there to be a conflict between physicians' financial interests and patients' medical and financial outcomes. We want the fee system to reinforce the physician's ethical imperative to do what is best for the patient.

⁷M. Pauly, "Doctors and Their Workshops" (Chicago: University of Chicago Press, 1980), pp. 67-63.

Can such an ideal free system be calculated or computed with existing data? Is this a simple technical problem which we can solve with our computers?

Obviously, no. Just as the process of price determination in real markets is iterative and continuous, establishing how much medicare is willing to pay will be an iterative, continuous process that will require monitoring, updating, and adjustment.

But one of the virtues of the fee-for-service system is that it provides much of the information needed to make these adjustments. How many services are being provided at each price? How does volume change as relative prices change? What services seem to have a big effect on people's ability to function; which seem to have little impact? As technology changes, as input prices fluctuate, as other factors change, the answers to these questions will change. But only by asking and trying to answer these questions can medicare, and indeed private insurers, impose the discipline on fees in the same way that informed consumers influence prices in conventional markets.

How would this information be transmitted, both to providers and patients? A mandatory fee schedule for physicians' services would be one way. But I believe that an indemnity schedule which is an exact reflection of a fee schedule might be better. Indemnity insurance, which pays the insured or the beneficiary a fixed amount for each and every service but does not limit physicians' fees, is by no means new. Nor is its recommendation as an alternative to CPR/UCR methods of fee determination new.⁸

Why is it better than a fee schedule? There are three primary reasons. First, it rewards medicare patients for seeking care from lower price physicians. Second, it does not eliminate price competition among physicians in trying to attract medicare patients. In practice, the indemnity levels may be set so low that few physicians will charge fees below them. But at least the indemnity approach leaves this option open. Third, it leaves physicians free to charge fees consistent with changes in their practice costs, in market conditions, and in technology. A fourth factor, outside the realm of economics, is that it would create less political conflict with physicians than would a fee schedule.

An indemnity schedule is like a fee schedule in that the indemnity amounts would represent how much medicare is willing to pay for each and every service. Relative indemnity values, for say a followup hospital visit relative to an initial office visit, would represent medicare's assessment of the relative costs and benefits of the two kinds of services. Like a fee schedule, it would eliminate confusion over how much medicare will pay. Like a fee schedule, indemnity amounts could be varied to reflect variations in the cost-of-living, so that the real value of the indemnity would be the same across regions and community sizes. If access and quality fall to unacceptable levels, then the indemnity payments will have to increase. Conversely, no increase will be called for as long as access and quality remain acceptable.

⁸ F. Gianfrancesco, "A Proposal for Improving the Efficiency of Medical Insurance," *Journal of Health Economics* 2 (1983), pp. 176-184; M. Pauly, "Indemnity Insurance for Health Care Efficiency," *Economic and Business Bulletin* (fall 1971), pp. 53-59.

Leaving physicians' charges free to fluctuate is critical to monitoring the access and quality levels that the indemnity schedule buys. The difference between the indemnity payments and physicians' average charges will be the barometer of how much access and quality beneficiaries are receiving for the medicare payments. As the differences between charges and the indemnity rates grow, medicare beneficiaries will have increasing difficulty in finding physicians willing to treat them, will have longer waits for appointments and in the waiting room, and will become more concentrated in practices which are of lower quality or offer fewer amenities.

No system avoids the inevitable tradeoffs which must be made in choosing among expenditure levels, access, and quality. But indemnity payments inbedded in the fee-for-service system offer the best chance of making these choices rationally and intelligently.

An indemnity system would be easy to administer. For one thing, intermediaries would no longer have to compute customary, prevailing, and reasonable charges every year for every physician, every service, and every claim. Physicians could be required or requested to make full disclosures to their patients of the indemnity amounts for the specific services they are planning to prescribe. Billing arrangements could be left up to the physician, as they are with most private insurance. Physicians who wish to attract patients will offer to bill medicare directly. If the bill exceeds the indemnity amount, then the physician would be paid the indemnity less the mandated cost-sharing amount. He or she would then bill the patient for the difference. If the bill were less than the indemnity, then the patient would receive the difference, less any cost-sharing. Other physicians may choose to bill the patient and let the patient collect the indemnity—less the cost sharing—from medicare. But these physicians may face higher collection uncertainty.

This brings me to the issue of assignment. Some people believe that mandating assignment will save beneficiaries money. That it will, but at the cost of lowering quality and access for those who are willing to pay for it. Mandating assignment may protect beneficiaries from increased charges, but it would not protect them from cuts in access or quality. It is also likely to lead to a trend toward medicaid-like practices which specialize in medicare beneficiaries.

As I noted earlier, the fee-for-service system alone cannot both promote efficiency and assure equity of access. Another policy tool is needed. If the purpose of the assignment option is to improve access for lower-income beneficiaries who are not eligible for medicaid, then another policy keyed to beneficiaries' income would be better. The most obvious choice would be either income-related cost sharing or an income-related cap on out-of-pocket expenses.

Others at this conference are much more expert than I on the best way to structure cost-sharing schemes. Thanks to the considerable amount of very good research on cost sharing, we should be in a good position to design and implement a workable income-related cost-sharing system that addresses the goal of equality of access much better than would mandatory assignment.

Subsidizing some people's cost sharing will obviously cost money, as the actuaries will no doubt attest. Just as obviously, raising the money will be a politically sensitive process. From a purely theo-

retical perspective, Federal general revenues would be the least distorting, most progressive revenue source. Another option to consider, which might contribute to better system-wide performance precisely because it would distort choices, is a tax on excessively generous private insurance plans, including possibly medicare supplementary policies. To the extent that such a tax pushes people toward being more fiscally prudent in purchasing insurance, then medicare beneficiaries will generally benefit from the reduced pressure on physicians' charges and hospitals' costs that less generous private insurance would entail. Such a tax would probably be less progressive, however, than the Federal income tax.

The pending medicare trust fund crisis requires difficult decisions to be made. But crisis also brings opportunity—the opportunity to make substantial and hopefully beneficial changes in the structure of medicare program. Whatever changes are made in the next year or two will probably be with us for many years to follow. I hope that the pressure for a short-run fiscal fix will not overwhelm this opportunity.

USING COVERAGE POLICY TO CONTAIN MEDICARE COSTS

(By H. DAVID BANTA, M.D., GLORIA RUBY, and ANNE KESSELMAN
BURNS, *Office of Technology Assessment*)

Medicare costs may be contained through a wide range of approaches. This paper describes the possibility of using the explicit approach of technology-specific coverage policy for cost containment. The method is inherently limited, because of the vast number of medical technologies. Nonetheless, the narrowness of current coverage policy and the inadequacies of the coverage process suggest that changes in policy and process can reduce medicare expenditures by promoting the appropriate adoption and use of technology.

Medical technology has now been widely recognized as a key contributor to health care costs, with estimates roughly up to 40 percent as technology's contribution to hospital cost increases (Freeland and Schendler, 1983; Waldman, 1972; Worthington, 1975; Feldstein and Taylor, 1977; Altman and Wallach, 1979). These estimates assume a broad definition of medical technology. OTA has defined medical technology as the drugs, devices, and medical and surgical procedures used in medical care, and the organizational and supportive systems in which they are provided. In this paper, we will concentrate on the clinical technologies.

Few would doubt that most medical technologies are beneficial. During the past few decades, medicine has been transformed by an influx of exciting new technologies. People who would have died in previous generations now live with a reasonable ability to function normally. For example, before renal dialysis was introduced beginning about 1960, those with end-stage renal disease died. Cardiac pacemakers have essentially made deaths from irregularities of heart rhythm unnecessary. Transplantation of organs such as the kidney and the heart have extended life for thousands. And new technologies such as hip joint replacements have made pain-free functioning possible for thousands of elderly people. Thus, while technology is unquestionably expensive, it is not a matter merely of removing the inefficacious from the system.

At the same time, there is considerable waste in the present system that is attributable to the inappropriate use of technology. Many surgical procedures seem to be overused in this country compared to other countries. Laboratory examinations and other diagnostic tests are used at high rates and, at times, when not indicated by the suspected conditions (Schroeder et. al., 1973; Dixon and Laszlo, 1974; Fineberg, 1977). Lengths of stay in hospitals are higher in many cases than can be justified by medical evidence of benefit (OTA, LOS, 1983). In brief, the system has encouraged the use of technology when any benefit, no matter how small, could be

hoped for. The challenge for the future is to devise a system that encourages the cost-effective use of technology.

These comments have focused on the relationships between medical technology and the health care system. As a significant component of the general system, the medicare program warrants specific attention. First, medicare costs have risen faster than those of the system as a whole. Between 1980 and 1981, for example, medicare program expenditures rose 17.9 percent, while national health care expenditures rose 15.1 percent (Health USA, 1982, Tables 71 and 82). Second, since the hospital is the focal point for many technologies and medicare is a relatively generous payor of hospital costs and less so for out-of-hospital costs, medicare would be expected to be very involved in medical technology. Finally, elderly people tend to have chronic medical conditions and they are heavy users of medical technology such as intensive care units and coronary bypass surgery. In 1980, for example, about 18 percent of medicare hospital stays involved intensive or coronary care units (OTA, ICU's, 1983).

While relatively little is known in specific terms about medical technology in the medicare program, it is known that 28 percent of all medicare costs go toward the last year of life of the beneficiaries (Lubitz, HCFA, 1983). This seems to indicate that terminal illness is a major expense for the program, and that life-supporting technology is an important contributor to costs.

DIFFUSION OF MEDICAL TECHNOLOGY

Medical technology develops in a myriad of ways in many different sites with a variety of sources of funding. The Government funds most basic biomedical research in this country, but private industry funds a substantial portion of applied research and technology development. Processes of development of technology have been little studied. However, since much modern technology is made up of combinations of medical devices, drugs, and human skills, their development is very complex. Control of development has proven to be difficult.

When the technology has been developed, it must come into use. The process of spread into use is called diffusion. Because of the difficulties of identifying new technology before it is introduced into widespread use, policy mechanisms have tended to focus on early diffusion, or adoption, of new technology. Thus, the Food and Drug Administration regulates all new drugs and medical devices for safety and efficacy. The health planning program requires certificate-of-need approval for institutions to make capital investments.

Factors leading to the widespread use of technology are many. However, little research has been done on manipulable factors, but has tended to concentrate on such factors as hospital size, which is difficult to influence. Only recently have researchers recognized the importance of reimbursement in the spread of new technology. Recent evidence shows that the method of payment is an important factor. And since it can be altered relatively easily, it has come to be seen as the policy mechanism of most promise for controlling medical technology. At the same time, the payment system is seen

as an effective way to control costs. The point is that controlling costs means controlling technology, and the reverse is also likely true.

MEDICAL TECHNOLOGY IN THE MEDICARE PROGRAM

The benefits in the medicare program are usually broad, general categories, rather than specific technologies. Part A covers hospitalization, psychiatric hospitalization, home health care, and post-hospital extended care services. Part B covers medically necessary physician services, outpatient hospital services, home health care, outpatient physical therapy and speech pathology services, independent laboratory services, some ambulance transportation, most prosthetic devices, drugs that must be professionally administered, blood, and some medical supplies.

Because benefits are in such broad categories, specific technologies have required individual coverage decisions. Coverage policy governs the eligibility of technologies for payment. In the past few years, rapid technological change has led to increasing needs for technology-specific decisions. At the same time, evaluating the health benefits and risks of specific technologies has become a formal part of the process of arriving at coverage decisions.

Coverage is generally defined as "the guarantee against specific losses provided under the terms of an insurance policy" (Discursive Dictionary, 1976). The term is frequently used interchangeably with benefits or protection. In the medicare program, coverage is distinguished from payment or reimbursement. Coverage refers to the types of benefits available to eligible beneficiaries, and payment refers to the amount and methods of payment for covered services (Young, p.c., 1983).

The basis of coverage policy for particular technologies not mandated by medicare is section 1862 of title XVIII of the Social Security Act, which excludes payment for items and services that are "not reasonable and necessary" for diagnosis, treatment or improved services. That section has traditionally been implemented with attention to the medicare goals of not interfering with the practice of medicine and of assuring beneficiaries the choice of providers.

Coverage decisions are made at the national level by the central Health Care Financing Administration (HCFA) office. They are also made by medicare contractors, called intermediaries (part A) and carriers (part B), who perform the medicare program's claims processing and payment function under HCFA's guidance.

Because of the general language of section 1862 and the absence of regulations or specific guidelines to implement that section, HCFA officials and medicare contractors have considerable latitude in determining which technologies are to be covered. Coverage decisions are developed and implemented in a decentralized manner. Moreover, there is considerable variation among contractors in several areas: (1) the decisions they make concerning the coverage of specific technologies; and (2) their implementation of coverage decisions (OTA, 1980; Bunker et al., 1982; Demlo et al., 1983). Much of the variation is due to absence of a precise definition of the term "reasonable and necessary." The criteria used by HCFA to deter-

mine is a technology meets this test are: (1) efficacy and safety generally accepted, (2) not experimental, (3) medically necessary for the individual case, (4) provided according to accepted standards of medical practice in an appropriate setting. It is worth noting that cost is neither a criterion nor an explicit issue in these criteria.

There is a basic contradiction in medicare's goal of not interfering with the practice of medicine and its coverage policy that judges technologies used in medical practice. The decentralized approach ameliorates the contradiction in its de facto acceptance of the premise that medical practice varies from one geographic area to another.

In addition to not using costs as a criteria, medicare has refrained from limiting technologies to restricted circumstances, such as certain institutions meeting certain criteria or physicians with specific skills.¹ On the other hand, medicare does limit coverage of some technologies to appropriate medical conditions. For example, in 1981, HCFA announced the coverage of specific types of therapeutic apheresis for three conditions, but denied coverage for other indications. Three additional disease indications were added in 1983 (OTA, Apheresis, 1983).

The recently passed DRG program can be expected to change the coverage process to an extent, but perhaps not dramatically. Indeed, the interactions between medicare coverage policy and DRG payment are limited to inpatient services provided in almost all short-term acute care general hospitals. Inpatient services in psychiatric, rehabilitative, pediatric, and long-term hospitals; outpatient services; and physician services—provided in or out of the hospital—are not included in the DRG payment system. Instead, they are paid for as before the law's enactment.

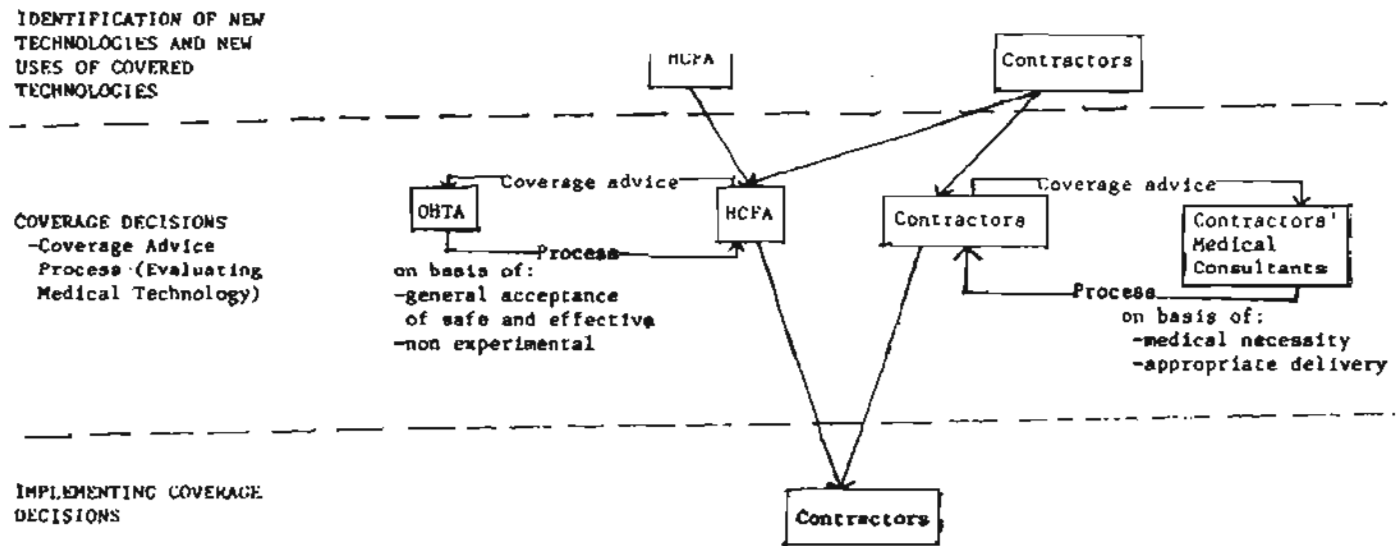
Most coverage questions arise with physician services. This is understandable, because technologies are generally provided by physicians. Furthermore, the physician services component of medicare is the fastest growing, although not the largest, in terms of costs. Since the DRG program changes the incentive for hospitals dramatically, future changes in medicare are expected to focus more on physicians services and outpatient services. For these reasons, the suggestions for changes made in this paper will address physician services. (See later section on DRG's.)

HOW COVERAGE DECISIONS ARE MADE

The coverage decision process is conceptually simple (see figure). Although the specifics vary, the process is the same at the national level and at the contractor level. First, new technologies and new uses of covered technologies are identified. Then, the decision is made as to whether or not to cover the identified technology. Generally, the decisionmakers receive advice that usually involves an evaluation of the technology focusing on efficacy and safety. The final step is implementation of the coverage decision.

¹ However, in January 1983, HCFA released coverage instructions to medicare contractors that for the first time limited payment for a technology—therapeutic apheresis—to its use in a specific setting and by specified providers (Commerce Clearance House Regulations, Jan. 31, 1983). At present, only therapeutic apheresis and closed loop blood glucose control devices fall into the category.

FIGURE 1.—Diagram of HCFA's Model Technology-Specific Coverage Process



SOURCE: U.S. Congress, Office of Technology Assessment, December 1983.

Identification.—Technologies can be identified by HCFA, by the HCFA regional offices, or by contractors. They are identified by different methods, including: Reviewing claims, auditing cost reports, informal interacting with providers, and receiving inquiries from such sources as manufacturers. In the past few years, HCFA has relied more on contractors knowledge and experience, assuming that contractors are more familiar with medical and hospital practice.

However, although contractors do identify many uncovered technologies, this process has serious flaws. Hospital claim forms in particular are not designed to identify new technologies. They use broad headings, such as radiology and pathology, that provide little information about specific technologies (Schaeffer, 1982). Intermediaries are required to examine only a 20 percent sample of inpatient claim forms (HCFA memo, 1981). The claim form for physicians required information about the use of specific surgical and medical technologies, but carriers may still overlook new technologies and new uses of covered technologies because of administrative inefficiencies and a high number of coding errors (Bunker, 1982). It is also easy for physicians and hospital administrators to request payment for an uncovered technology under an established code. For example, chemonucleolysis (injection of chymopapain into a ruptured intervertebral disc) is not a covered benefit of Blue Shield of California, but discography is covered. The claim for the services of the physician may list the procedure number for "discography injections," when claiming reimbursement for chemonucleolysis (Bunker, 1982).

Based on advice provided by their medical advisors, medicare contractors make their own coverage decisions about the majority of new services they identify. When they feel unable to decide on coverage, the question is supposed to be submitted to a HCFA regional office. For the most part, regional offices refer coverage questions requiring medical decisions to the HCFA central office. Only the Boston regional office has a medical consultant.

Prior to 1979, the majority of coverage questions received at the central HCFA office were submitted by the regional offices. However, since 1979 others, particularly manufacturers, have increased their participation in the coverage process. During 1981, 25 percent of coverage questions submitted to the central HCFA office were from producers of medical technologies. (OTA, draft, 1983). Manufacturers are very concerned to know as early as possible whether their new products will be covered. In the past year, the national association that represents manufacturers of medical devices, the Health Industry Manufacturers Association [HIMA], advised its members to request coverage for their products from medicare contractors and not the HCFA central office for more timely and favorable decisions (HIMA, p.c., 1983). This change in HIMA's strategy was prompted by its perception that not only had the time required for reaching and releasing coverage decisions made at the national level increased, but the number of products being denied coverage also increased.

Coverage Decisions.—Coverage decisions are made by medicare contractors and by HCFA. The contractors act upon most questions raised in their areas, following the advice of medical consultants.

Contractors show variation in their decisions about specific technologies (Demlo et al., 1983). As a result, the specific package of covered benefits varies somewhat across the country and even within regions. There is no regional or national standard for covered services.

HCFA expects contractors to refer general coverage issues of national interest to the central office (HCFA memo, 1981). However, referral is not required by statute or regulation. Furthermore, there is no accounting of contractors' adherence to this suggestion.

The locus for coverage decisions within HCFA is the Office of Coverage Policy. If the coverage decision concerns drugs or some medical devices, prior evaluations by the Food and Drug Administration provide some indications of safety and efficacy. There is, however, no comparable mechanism for medical and surgical procedures. FDA evaluations are not definitive either, since the standard for efficacy is that the drug or device have the effects claimed by the manufacturer. HCFA judges efficacy as the ability to improve health.

If medical advice is required for a coverage decision, the question is presented to the physicians panel within HCFA. The panel may request an evaluation from the Office of Health Technology Assessment [OHTA], the successor to the National Center for Health Care Technology, disbanded in 1981. After conducting an assessment on the safety, efficacy, and clinical effectiveness of a technology, OHTA may recommend that a technology not be covered by medicare, or that it be covered with or without restrictions. The actual coverage decision is made by HCFA, which notifies HCFA contractors and State medicaid agencies.

Coverage decisions about technologies of national interest are especially based on criteria of "general acceptance" and "stage of development." These call for judgments that are difficult to base on good information. The terms are not defined, and do not fit well with the complexity of any technology's development.

Implementation of Coverage Decisions.—For the most part, HCFA's implementation of national coverage decisions consists of disseminating the decision through various sources, including HCFA's regional offices, instruction manuals, and transmittal letters, to contractors and providers. Monitoring the implementation is largely decentralized and done by claims review; direct Government involvement is largely confined to cases of fraud and abuse.

The limitations of claims review in identifying new technologies also apply to claims review as a means of evaluating the implementation of coverage decisions. The capability of monitoring a coverage decision varies among contractors. It varies in part because of the complexity of medicare coverage rules and deficiencies in the transmittal of information between HCFA's central office and regional offices and between regional offices and medicare contractors (Demlo, et. al., 1983).

COVERAGE POLICY UNDER DRG HOSPITAL PAYMENT

While no changes have yet been announced in coverage policy under the DRG program, there will clearly be an interaction. Both DRG payment and coverage policy can affect the rate and direction

of technological change, and together they have great implications for medical technology in the medicare program.

Because specific technologies used in hospital settings are not easily evident from the DRG classification, HCFA will not be able to discern the use of some technologies that are unsafe, not efficacious or experimental. This will be similar to the situation under the previous cost-based mode of hospital payment. However, some DRG's are based on specific technologies, in particular a number that are specific surgical procedures. Those DRG's will allow for improved identification.

Perhaps more important are the different incentives under the DRG payment system. One can expect that the use of procedures that lower the cost per case to increase, and those that raise the cost to diminish. Those that raise the cost may lead to appeals from hospitals as outlier cases, many of which will be high-cost outliers precisely because of costly technology.

Finally, new technologies will be recognized during the process of adjusting DRG rates. Indeed, updating DRG prices appears to offer the most significant opportunity of identifying such technologies for coverage purposes.

For the DRG payment system, changes in DRG relative weights or prices will be made, in part, to reflect technological change. Because this process must include identification of new technologies, it is reasonable that some of the techniques, including technology assessments, used to adjust DRG rates will be similar to those used to support coverage decisions. For example, the Prospective Payment Assessment Commission [ProPAC] has been given broad authority to assess medical technology and the appropriateness of medical practice patterns in developing its recommendations for DRG rates. The Commission's role, however, is only advisory; HCFA makes the decision concerning the appropriate payment rate for hospital services.

Thus, both the coverage process and the process of adjusting DRG rates share a similar "approval for payment" function. The most important difference is that the DRG rate adjustment process includes issues of cost as an integral issue.

Another issue arises because medicare pays hospitals one way and other providers another, and because coverage cannot be limited to payment for specific technologies to their use in certain settings and by certain providers. Since costs are a consideration to providing inpatient hospital services under the medicare DRG payment system and not a large consideration in providing other services in other settings, the incentive to shift high-cost technologies from an inpatient to an ambulatory setting is a large one.

FACTORS IN EVALUATING TECHNOLOGIES FOR COVERAGE DECISIONS

As described above, the prime factors used by HCFA in evaluating coverage include efficacy and safety. However, even this level of evaluation is not simple. Data on efficacy and safety is often not available in general, but is even more difficult to obtain for new technologies. Despite increasing attention to coverage issues, no mechanism has been developed to assure that studies are done in

such a way as to produce data when it is needed for decisionmaking.

Theoretically, at least, substitutability is an important issue for the medicare program. Often one technology addressed to a specific disease problem is much cheaper than another. The extent to which two technologies are equivalent is the issue. The program could save quite a lot of money if more about equivalence were known. However, data on equivalence is even more scarce than data on efficacy. Clinical trials are usually not organized in such a way to address this issue. Also, the present statute may not give the program authority to exclude a technology on the basis that alternatives are available. This depends, of course, on the definition of "reasonable and necessary."

A related issue is that of costs. The program has seldom explicitly considered costs. Although the issue of including cost criteria into coverage decisions has been examined by the general counsel's office, it has never been resolved—Streimer, P. C., 1983. At this time, there is no restriction on using cost criteria in coverage decisions, but HCFA chooses not to do so. Nonetheless, there has been a great deal of discussion in recent years about including costs as a criterion. If this were done, either by statute or regulation, the issue would, in effect, become cost effectiveness. There is a family of techniques for assessing cost effectiveness that have gained prominence in recent years and that could be helpful. However, these techniques also have significant weaknesses. Some of these weaknesses can be ameliorated with time, such as the lack of efficacy data on which to base cost-effectiveness calculations. Others cannot, however. For example, cost effectiveness analysis focuses on factors that can be quantitated, such as death and financial cost, while tending to ignore nonquantitative factors, such as ethics and equity. In effect, this weakness means that cost-effectiveness analysis cannot in most cases be the dominant factor in a decision. However, it can be very helpful in assisting the policymaker in structuring a problem and understanding its ramifications.

Running through the issue of coverage decisions is the problem of data. Coverage decisions must be made rationally to be respected by the outside world. Providing technologies inappropriately can cause quite a lot of harm, as can withholding efficacious technologies. Yet there is a scarcity of data on which to perform assessments or to base such decisions. In addition, it is widely recognized that HCFA does not have the resources necessary to understand the role of new technology in its program. While recent years have seen active policy debates concerning technology and technology assessment, investments in data collection have fallen. Without more data, coverage decisions probably cannot be improved or tightened.

AREAS FOR CHANGE IN MEDICARE COVERAGE POLICY

In the past, coverage policy in the medicare program has had important potential, but limited opportunity for attempting to assure cost-effective health care. Coverage policy has been an important tool in protecting beneficiaries from unsafe and inefficacious medical technology. But, it has been restricted in influencing the diffusion of cost-effective technology due to the exclusion of cost criteria

in the assessment of technologies for coverage decisions and by inadequacies in the coverage process. Despite the enactment of the DRG payment method for inpatient hospital services, the importance of coverage policy is only marginally diminished. Coverage decisions deal primarily with physician services, and physician payment has not been changed—not yet. In addition, the DRG program requires coverage decisions in effect, especially in establishing new DRG's—such as those for new surgical procedures.

An obvious change to consider is to broaden the legal basis for coverage. As mentioned above, "reasonable and necessary" has not been formally defined. It may be that costs and broader social issues could be included in the definition if it were made by regulation. If not, or if the administration is not interested in pursuing such a change, the law could be amended to specify such factors as worthy of concern. Indeed, it seems rather absurd that the medicare program cannot consider financial cost, but must apparently pay for any technology found to be efficacious and safe, regardless of how much it costs.

Another change to consider is to allow limitations in coverage to certain types of providers, certain types of sites, or even specific sites.² Such limitations could both help control costs and improve quality. For example, many surgical procedures are done in low volume in hospitals in this country, and the results—such as death rates—have been repeatedly been shown to be inferior in such settings—Bombardier C., and others, 1977. It may also be that excessive or unnecessary procedures are done in institutions with low volumes. This change could possibly also be made in regulation, but may require statutory change. Such a change seems clearly to be advantageous to both patients and the program itself, although not to some physicians and hospitals.

A combination of policies that includes limiting diffusion of technology to certain providers, limiting utilization to certain indications, and limiting payment in other ways, could undoubtedly reduce the rates of use of certain technologies. This is indicated by the large variations in use of technologies.

At present the medicare program cannot demand data from providers. A change in the law could allow coverage only on the basis that such data would be furnished. The DRG amendments do give HCFA the authority for the first time to fund clinical research, including clinical trials. This further change would give medicare some powerful tools to develop data for providing cost-effective care.

Finally, the interface between coverage policy and DRG payment needs to be explored more thoroughly. The Office of Health Technology Assessment [OHTA] is presently limited to responding to requests from HCFA for technology assessments. In part because of questions about its eventual role, it has not developed a comprehensive program for medical technology assessment and transfer. The Commission described previously will play an active role in

² As noted previously, in 1983 HCFA issued coverage instructions that for the first time limited the coverage of a technology (therapeutic apheresis in January 1983 and closed loop blood control devices in July 1983) to its use in a specific setting and by specific providers. If such limited types of coverage becomes established policy, the issues to be discussed becomes academic. However, indications are that these decisions do not represent a major change in policy.

this arena. The relationship between OHTA and the Commission is a critical one for coverage purposes.

DISCUSSION

Attempts to control technology and thereby control costs have until now been rather ineffective. In large part, it seems to us, this is because the forces of the health care system run in the opposite direction. Investments in developing new technology are large, and industry has many tools for convincing providers that new technologies are essential for good patient care. New technology is often exciting, and does indeed often offer incremental improvements in health status for sick people. Technological procedures are associated with higher fees for physicians, and new technological procedures have even higher fees. Hospitals also are paid more for technological services than for cognitive ones. The prevailing fee-for-service system of physician payment and cost-reimbursement payment to hospitals are inherently inflationary, with strong incentives to buy and provide more. The new DRG system is a first step to change this last factor. However, it is not surprising that attempts so far have foundered, when so many forces have pointed in the other direction.

An important issue for the future is the extent to which changes in the medicare program can change the entire system. If medicare does not provide a technology but it is a highly visible one, strong political pressures mount for coverage. The congressional hearings held on transplantation—primarily liver—in the spring of 1983 provide a good example. In those situations, it is not surprising that HCFA officials have been rather conservative about denying coverage.³

To be most effective, the coverage process needs to be capable of identifying all the new technologies introduced into the system and paid for by the medicare program, as well as those covered technologies which are unproven as safe and effective. Coverage would be even more effective if HCFA became aware of new technologies and new uses for established technologies before questions of coverage were raised. For example, HCFA could monitor FDA's processes to anticipate new medical devices. The National Center for Health Care Technology had this task as part of its charge. Similar efforts in the private sector could be scrutinized. After identification, all technologies of national interest could be carefully evaluated in a process using objective criteria performed without undue delay. The current process is far from this model.

Tightening this system would undoubtedly save money for the program, and might also improve quality of care. However, it would not be politically popular. In addition, many would have reservations about centralizing decisions concerning health and disease and having them made by HCFA bureaucrats. Such a change would require the following actions:

One, restructuring the coverage process to encourage the identification of all new or emerging technologies.

³In recent years, HCFA has tightened its coverage policy for most technologies. However, the highly visible ones remain an exception.

Two, referring all coverage issues of national interest to the HCFA central office.

Three, uniformly implementing all national coverage decisions.

Four, more explicitly considering costs in coverage decisions.

Five, limiting coverage of certain technologies to specific providers and specific sites of care.

As cost containment becomes an increasingly important objective of the medicare program, the notion of linking coverage policy and technology assessments to change economic incentives in the program has gained momentum. A real possibility would be to deny coverage until good data were available. This method is being used formally in the unique case of heart transplants, where the decision will not be made until after completion of a large study being carried out by the Batelle Institute. Including costs and other factors, such as limiting coverage to the most effective site for carrying out a procedure, would assist in this goal.

Coverage policy is also related to utilization review. One of the purposes of utilization review is to assure that services given are covered. According to the Social Security Amendments of 1983, the new peer review organizations [PRO's] will review the validity of diagnostic information provided by hospitals—DRG verification—completeness, adequacy, and quality of care provided to inpatients; and appropriateness of admissions and discharge. Since the incentives in the DRG system are generally to provide fewer services, PRO's will need to be concerned with underprovision of services. Thus, utilization review and coverage policy support each other.

In the realm of physician services, changes in payment methods seem inevitable. One change that would not require sweeping change in the program is to build a fee schedule on a technology-by-technology basis. If the fee schedule were to pay for groups of services or on a per case basis as the DRG system does, individual technologies would not be apparent of HCFA and the coverage process would not be pertinent. New and expensive technologies would be assessed, however, when fees were adjusted. Specific fees for technological services, however, would allow more scope for the coverage process and would also make cost evaluations very important. A coordinated effort for assessing technologies for coverage and for adjusting rates would need to be established.

What is the potential for coverage policy to help contain costs in the medicare program? There is little doubt that large savings could be made, assuming that political and technical problems preventing a strong coverage policy could be overcome. A combination of policies suggested in this paper offer a possible approach. Caution is necessary, however, with respect to policies concerning centralizing the coverage process. A nationally determined coverage process may not take into account the unique needs of all patients and may prove unduly costly. Furthermore, the decision to reduce variation in coverage policy and increase the explicitness and uniformity of medicare benefits requires careful judgment and balance. We doubt that the centralization that would be necessary could in fact be carried out.

The closing thought for this paper concerns technology assessment. The tool of coverage policy is a tool aimed largely at technology. It requires good data and information to work well. In the

DRG amendments, this fact was explicitly recognized by the Congress, which was concerned about the updating of DRG rates to allow incorporation of new technology (and perhaps to assure that obsolete technology was discarded by lowering rates). The tool devised was the Prospective Payment Assessment Commission which will assess DRG payment rates in association with the technologies that might be incorporated into those DRG's. This is the first explicit merging of costs and effectiveness in the Medicare program. It offers an interesting precedent for the future.

REFERENCES

- Altman, S.H., and Wallack, S.S., "Technology on Trial—Is It The Culprit Behind Rising Health Costs? The Case For and Against," in *Medical Technology: The Culprit Behind Health Care Costs*, proceedings of the 1977 Sun Valley Forum on National Health, DHEW Publication No. (PHS) 79-3216 (Washington, D.C.: U.S. Government Printing Office, August 1979).
- Bombardier, C., Fuchs, V.R., Lillard, L.A., and Warner, K.E., "Socioeconomic Factors Affecting the Utilization of Surgical Operations," *NEJM* 297(13):699, September 29, 1977.
- Bunker, J.P., Fowles, J., and Schaffarzick, R., "Evaluation of Medical Technology Strategies: Evaluation of Coverage and Reimbursement (First of Two Parts)," *NEJM* 306(10):687, March 11, 1982.
- Commerce Clearance House, *Regulations Concerning Therapeutic Pheresis*, effective date, January 31, 1983.
- Demlo, L.K., Hammons, G.T., Kuder, J.M., Rodgers, S., and Lynch, D., "Report of a Study on Decision-Making by Medicare Contractors for Coverage of Medical Technologies," working paper draft (contract to OTA), August 15, 1983.
- Dixon, R.H., and Laszlo, J., "Utilization of Clinical Chemistry Services by Medical House Staff—An Analysis," *Archives of Internal Medicine*, 134:1064-1067, 1974.
- Feldstein, M., and Taylor, A., "The Rapid Rise of Hospital Costs," GPO Stock No. 052-003-003-03.1 (Washington, D.C.: U.S. Government Printing Office, January 1977).
- Fineberg, H., "Clinical Chemistries: The High Cost of Low-Cost Diagnostic Tests," in *Medical Technology: The Culprit Behind Health Care Costs?* S.H. Altman and R. Blendon (eds.), proceedings of the 1977 Sun Valley Forum on National Health, DHEW Publication No. (PHS) 79-3216 (Washington, D.C.: U.S. Government Printing Office, August 1977).
- Freeland, M.S., and Schendler, C.E., "National Health Expenditure Growth in the 1980's: an Aging Population, New Technologies, and Increasing Competition," *Health Care Financing Review* 4(3):1-58, March 1983.
- Lubitz, J., and Prihoda, R., "Use and Costs of Medicare Services in the Last Years of Life," Draft paper from the Office of Research and Office of Statistics and Data Management, Health Care Financing Administration, DHHS, June 1982.
- McPherson K, Wennberg, J.E., Hovind, O.B., and Clifford, P., "Small-Area Variations in the Use of Common Surgical Procedures: An International Comparison of New England, England, and Norway," *NEJM* 307:1310-1314, 1982.
- Reiss, J.B., "Thoughts on Technology Assessment and Paying for Services," working paper for OTA project on Strategies for Medical Technology Assessment, November, 1981.
- Schaeffer, L., "Role of the HCFA in the Regulation of New Medical Technologies," in *Critical Issues in Medical Technology*, B.J. McNeil and E.G. Cravalho (Eds.) (Boston, Ma.: Auburn House, 1982).
- Schroeder, S., et al., "Use of Laboratory Tests and Pharmaceuticals: Variation Among Physicians and Effect of Cost Audit on Subsequent Use," *JAMA*, 225:969, 1973.
- U.S. Congress, Office of Technology Assessment, *Medical Technology and Costs of the Medicare Program*, draft, July 1983.
- U.S. Congress, Office of Technology Assessment, *Diagnosis Related Groups (DRGs) and the Medicare Program: Implications for Medical Technology* (Washington, D.C.: U.S. Congress, Office of Technology Assessment, OTA-TM-H-17, July 1983).
- U.S. Congress, Office of Technology Assessment, *The Implications of Cost-Effectiveness Analysis of Medical Technology*, OTA-H-126, (Washington, D.C.: U.S. Government Printing Office, August 1980).

- U.S. Congress, Office of Technology Assessment, Health Technology Case Study 23: The Safety, Efficacy, and Cost-Effectiveness of Therapeutic Apheresis, OTA-HCS-23, (Washington, D.C.: U.S. Government Printing Office, July 1983).
- U.S. Congress, Office of Technology Assessment, Health Technology Case Study 24: Variations in Hospital Length of Stay: Their Relationship to Health Outcomes, OTA-HCS-24, (Washington, D.C.: U.S. Government Printing Office, August 1983).
- U.S. Congress, Office of Technology Assessment, Health Technology Case Study #—: Intensive Care Units (ICUs): Costs, Outcomes, and Decisionmaking, Draft, December 1983).
- U.S. Department of Health and Human Services, Health Care Financing Administration, Office of Coverage Policy, Bureau of Program Policy, "Operating Guidelines for Determining Medical Necessity of Medicare items and Services: Discussion Draft," mimeo, February 2, 1981 (HCFA memo).
- U.S. Department of Health and Human Services Office of Health Research, Statistics, and Technology, Health, United States—1982 DHHS Publication No. (PHS) 82-1232 (Hyattsville, Md.: DHHS, 1982).
- U.S. House of Representatives, Committee on Interstate and Foreign Commerce, Subcommittee on Health and the Environment, "A Discussion Dictionary of Health Care," February 1976 (Washington, D.C.: U.S. Government Printing Office, 1976).
- Waldman, S., "The Effect of Changing Technology on Hospital Costs," Research and Statistics Note, DHEW Publication No. (OS) 76-502 (Washington, D.C.: Social Security Administration, Feb. 28, 1972).
- Worthington, N.L., "Expenditures for Hospital Care and Physicians' Services: Factors Affecting Annual Changes," Soc. Security Bull. 38(1975):3-15.
- Young, D., U.S. Department of Health and Human Services, Health Care Financing Administration, personal communication, January 1983 (Young, 1982).

THE MEDICARE COVERAGE DECISION PROCESS AND MEDICAL TECHNOLOGY

(By RICHARD RETTIG, *Illinois Institute of Technology*)

The OTA paper, "Using Coverage Policy to Contain Medicare Costs," by Banta, Ruby, and Burns, requires careful reading to be fully understood. It is written at a general level without extensive detail, uses the conditional "if * * *, then * * *" form repeatedly and relies frequently upon the passive voice, yet intersperses numerous declaratory statements throughout. This commentator initially read the paper as advocating various changes in medicare coverage policy. But, as the senior author declared in the discussion, "We do not believe that the coverage process is necessarily the most desirable way to approach the control of costs or control of technology. * * * We are personally skeptical—of this."

In these remarks, I indicate why the coverage-decision process constitutes one of those institutional arrangements which is necessary, performs poorly, and remains difficult to improve. Then, I discuss the two major policy choices confronting medicare with respect to what to do about coverage policy and procedure. Finally, I suggest how the Congress might proceed if it wishes to further clarify the choices it confronts.

COVERAGE: A NECESSARY PROCESS

A medical coverage-decision process is a necessary and existing feature of all medical insurance systems, public or private. It is necessary because all systems, whether medicare or private insurance, specify the existing benefit package of covered procedures and stipulate a procedure for determining how new procedures shall be added to that benefit package. Because the coverage-decision process stands at the portal of entry to the set of currently covered procedures, large stakes ride on coverage decisions about new procedures. These stakes include: medical benefits to patients; reputation, cost, and quality of service to provider institutions; income, professional reputation, and career advancement to physicians; profits and market share to suppliers and manufacturers; and, normally, increased costs to insurers.

The medicare coverage decision process, the subject of the Banta, Ruby, and Burns paper, constitutes a necessary, real-world, action-forcing process of some consequence. Interestingly enough, very little empirical research has focused directly on the medicare process. So the descriptive basis for considering policy changes is quite inadequate. Most observers tend to think that the coverage process works poorly but is very difficult to improve.

Several reasons exist for its poor performance. First, the medicare coverage decision process relies upon broad general criteria

pertaining to safety and efficacy, but excludes cost of a new procedure as a decision criterion.

Second, the process effectively cedes authority for decision-making to those experts in medicine who simultaneously represent the strongest, most articulate advocates for approval of a new procedure. Third, numerous opportunities exist for physicians and provider institutions to obtain reimbursement for a new procedure by billing for it under a category used for a currently covered procedure. Finally, numerous possibilities also exist in the medicare reimbursement system for simple error in failing to note the submission of a claim for a new procedure.

The reasons why the coverage process is difficult to improve are technical, administrative, economic, and political. Technical issues include the limited amount and quality of data available for decisionmaking, and analytical limits on assessing safety, efficacy, and cost-effectiveness of medical procedures. Administrative problems include the limited number and competence of trained analysts engaged in the coverage process, and the lack of higher level support for increasing the number or improving the quality of personnel. Economic or resource limits flow from the general scarcity that constrains medicare administration and the reluctance of officials to invest in data or people. Political reasons that hold back improvement derive from the substantial stakes that the numerous stakeholders have in maintaining the existing arrangements.

Several broad policy choices confront policy officials regarding the question of what, if anything, to do about the medicare coverage decision process with respect to the purpose of constraining the costs of medicare. The choices before both legislative and executive branch policy officials are basically two:

Rely primarily upon the newly established prospective payment system to contain costs, or upon this DRG-based system in combination with other policy interventions, but leave the present coverage decision process unchanged.

Augment the cost containment effects by the DRG-based reimbursement system by tightening the coverage decision process.

RELY ON THE DRG SYSTEM

The DRG-based payment system is too recent for anyone to know what its actual effects upon medical technology will be. A recent OTA Technical Memorandum, "Diagnosis Related Groups (DRG's) and the Medicare Program: Implications for Medical Technology,"¹ on which the current authors draw, discussed the likely effects of DRG's upon the use of presently available medical technologies and upon technological change in medicine—"the adoption of new technologies and discarding of old ones." That discussion arrived at several general conclusions which are briefly summarized below.

DRG's create incentives to reduce the cost per case of hospital care and to increase hospital admissions. Cost reduction incentives are expected to lead to shortened lengths-of-stay, a reduced number or mix of services provided during each stay, and lower prices paid

¹ Office of Technology Assessment, *Diagnosis Related Groups (DRG's) and the Medicare Program: Implications for Medical Technology*, A Technical Memorandum, Washington, D.C., July 1983.

for inputs used in producing services. The magnitude and direction of effects will be a function of: The proportion of a hospital's cases covered by DRG payment; the passthrough of some costs; the means of DRG rate construction; the means of updating DRG rates; and the level of risk and reward of the payment system. Technology-specific effects of DRG's are anticipated for the number and intensity of ancillary services, the settings in which technologies are used, the specialization of services, and the "technology product mix."

Technological change effects of DRG's, according to OTA, are likely to encourage cost-saving technology and, conversely, discourage cost-increasing technology. The particular effects will vary according to the type of innovation and whether it affects capital costs, operating costs, or both. Table 4 from the OTA Technical Memorandum, reproduced below, summarizes these cost effects (positive or negative).

TABLE 4.—IMPACT OF TECHNOLOGICAL INNOVATION ON PER-CASE COSTS

Type of innovation	Direction of effect on—			Incentives for adoption	
	Capital cost per case	Operating cost per case	Total cost per case	With capital in rate	Without capital in rate
I. Cost-raising quality-enhancing new technology.....	+	+	+	↓	↓
II. Operating cost-saving innovations:					
A.....	+	-	+	↓	↑
B.....	+	-	-	↑	↑
III. Capital cost-saving innovations:					
A.....	-	+	+	↓	↓
B.....	-	+	-	↑	↓
IV. Service/procedure disadoption.....	-	-	-	↑	↑

Source: Office of Technology Assessment.

Several comments about this OTA schema deserve to be made. First, the technical memorandum does not differentiate between the human and physical aspects of operating costs. Capital costs in the above table refer to physical capital—scientific and technological knowledge pertinent to the diagnostic or therapeutic aspects of medicine which is embodied in physical equipment and procured through an institution's capital acquisition process. Operating costs, however, refer both to the costs of equipment procured by purchase order (usually small items), consumables, disposables, and other supplies—the physical component of operating costs, as well as to the costs of professional personnel—salaried physicians, nurses, technicians, social workers, and the like—in whom scientific and technological knowledge has been embodied through education, training, and experience. This distinction between the components of operating costs is important because the DRG system will

act differentially on each component, as well as differently affecting capital and operating costs.

Second, technological change is inappropriately restricted in the OTA Technical Memorandum to the adoption of new technology or the abandonment of old, thus focusing on product or procedure innovations having a nonincremental cost effect. This ignores technical change which consists of incremental process innovations—whether in manufacturing techniques, product characteristics, or service provision. Yet these nonincremental process innovations, usually reduce costs often substantially over time and frequently enhance quality. Incremental process changes in medical technology, it is reasonable to expect, will occur under the DRG-based payment system to a greater extent than under the previous cost-based payment system as both providers and suppliers seek efficiencies within the per case cost limitation framework.

Third, the incentives of the DRG system apply directly to the providers of medical services, as argued by the OTA Technical Memorandum, by encouraging the search for the most efficient use of inputs and by encouraging greater prudent buyer behavior relative to equipment and supplies. Of comparable importance, suppliers or manufacturers receive a derivative signal from the DRG system to engage in greater price competition in marketing their products to these prudent buyers, an incentive not mentioned by the OTA.

What are the implications, then, regarding the policy choice of relying upon the DRG system and leaving the coverage decision process unchanged? The most obvious implication, given the lack of experience with the DRG system, is simply to wait and watch the effects of the new system, mindful that it will exert a wide array of cost effects along the lines indicated in the OTA document and in the above discussion. The other implication is to monitor closely the DRG rate adjustment process for what can be learned about the use of cost data that might apply to coverage decisions.

TIGHTENING THE MEDICARE COVERAGE PROCESS

We turn now to the policy option of tightening the medicare coverage decision process. A threshold consideration here is whether the medicare statute should be changed to explicitly authorize changes in coverage policy and procedures. It can be argued that existing statutory authority is sufficiently broad to permit many changes to be made. Some changes may require, however, that the law be revised. More importantly, in this writer's view, any changes from the current system promise to be sufficiently controversial and consequential to warrant explicit congressional action. Reversal or major modification of longstanding traditions and practices deserves full public discussion and debate and a clear legislative mandate would be needed to legitimize any such change, facilitate administrative implementation, and protect the Government against challenge in the courts.

Several steps might be regarded as candidates for action within a general strategy of tightening the coverage decision process of medicare. Two of the most significant are:

Establishing explicit statutory authority for selective coverage, thus permitting medicare to limit the coverage of certain procedures to particular institutional settings, specified indications for use, stipulated qualifications for practitioners, predetermined characteristics of patients, and the like.

Changing the medicare statute to authorize the inclusion of cost, in addition to safety and efficacy, as a decision criterion in the coverage process.

Regarding selective coverage, the rationale for this is to remedy the all-or-nothing character of the current process. Presently, if a new medical procedure moves clinically from an experimental to a "no longer experimental" stage, a favorable coverage decision means that all participating medicare providers can now be reimbursed for the procedure. But the establishment of efficacy may have occurred in one or perhaps a small handful of highly specialized major medical centers and the procedure may be quite unsuitable for wide spread use in the large number of community hospitals. Limiting coverage to provider institutions meeting certain criteria permits the procedure to advance beyond the experimental stage into de facto a demonstration stage where the benefits can be made available to patients concurrent with the opportunity to establish a setting where continued clinical learning can occur. Given the positive correlation, for example, between the volume of certain surgical procedures and patient outcomes,² such a mechanism to protect patients and facilitate clinical learning would appear helpful.

The inclusion of cost data as a factor in coverage decisions is far more controversial. If a procedure is new, its actual cost experience may simply be an inadequate basis on which to make binding reimbursement determinations. In other contexts, firms introducing new products to the market confront great uncertainty about customer acceptance, demand, and preferred uses, as well as technical uncertainty about performance in the intended application and the range of potential applications, and consequently uncertainty about the costs of the new product. To fix a reimbursement rate on the basis of limited cost data acquired during the period of greatest uncertainty about demand, use, performance, and cost may inadvertently commit the Government to a higher rate than warranted. Or it may result in a rate that is too low to permit an adequate return on investment by a supplier or manufacturer, and thus discourage the introduction of a useful medical innovation. In any event, there are no well established means that now permit medicare to acquire good, reliable cost data and judiciously use it to establish the right price for a procedure. The current procedure, which formally precludes the consideration of cost but informally requires complex, indirect negotiations about price, may be the second best institutional arrangement not easily improved upon.

²H. S. Luft, J. P. Bunker, and A. C. Enthoven, "Should Operations Be Regionalized?" *New England Journal of Medicine*, Vol. 301, pp. 1364-1369, 1979.

ONE APPROACH: HEARINGS ON COVERAGE

A possible approach exists, however, by which Congress could explore the issue of whether or not it wished to tighten the medicare coverage decision process. In 1980, the Health Care Financing Administration established an Office of Coverage Policy. This happened in response to the formalization of the PHS response to medicare requests for advice on efficacy of new procedures which occurred during the 1979-81 period of the National Center for Health Care Technology. That HCFA office, located within the Bureau of Program Policy, later helped to draft a never-published "Notice of Proposed Rulemaking" on the subject of "Standards and Procedures for Medical Service Coverage Decisions." This internal draft NPRM circulated widely during 1980 and 1981, one of official Washington's lightly-guarded national secrets, and provoked considerable intense discussion in many quarters.

Without taking any position on the merits of the document, Congress might publish it as a committee print, since it does constitute the most thorough discussion of the coverage issue that exists. The Congress could then use the document as the focus for a set of hearings about the coverage process. The draft regulation proposes to change both existing procedures and criteria, including all the issues discussed by Banta, Ruby, and Burns, so it could serve admirably to sharpen the issues. Since it was prepared under the Carter administration, the current administration would not be constrained from criticizing it. Representatives of the medical community, providers, suppliers, and other interested parties could also come forward with their critical responses.

A set of hearings has the virtue of permitting Congress to observe the performance of the DRG-based system of prospective payment for the moment, while deliberately exploring the complex, sensitive, but important issue of coverage for possible legislative action at a later time. One could ask for less.

MEDICARE FINANCING REFORM: A NEW MEDICARE PREMIUM

(By KAREN DAVIS and DIANE ROWLAND, *Johns Hopkins University*) *

For almost 20 years, the medicare program has operated with relatively little controversy—steadily paying the hospital and physician bills of millions of elderly and disabled Americans.

Nearly 30 million elderly and disabled people, representing over 12 percent of the U.S. population, rely on medicare to help finance their health expenses. Medicare has won widespread support by relieving some of the financial burden of health care bills for the elderly and disabled and their families and by insuring financial access to hospital and physician services for many of the Nation's most vulnerable and critically ill citizens.

Yet, despite its past success, the program is likely to come under intense scrutiny in the years ahead. The program spent \$47 billion in 1982, up 17 percent over the previous year.¹ It is a major item in the Federal budget, accounting for one out of every \$15 spent by the Federal Government and two thirds of all Federal health outlays. Medicare outlays are expected to continue their upward spiral—reaching \$112 billion by 1988.²

The substantial increases in medicare outlays projected for the future will severely strain the revenue sources that currently finance medicare spending. The problem is most immediate and critical for the hospital insurance (HI) component of medicare which is financed by a payroll tax and administered through a separate trust fund. The HI trust fund is projected to be depleted by the end of the decade and to incur a cumulative deficit of \$98 billion by 1995, even if tight limits are retained on hospital prospective payment levels after 1985.³

In response to the impending financing crisis in the HI trust fund, this paper explores an option to raise additional revenue to expand the financing base for medicare. Instead of reducing the scope of services covered by medicare or increasing the cost sharing requirements for the elderly and disabled medicare beneficiaries who use services, this approach calls for replacing the current

* The research was supported by the Commonwealth Fund, New York, N.Y. The views expressed here are those of the authors and do not necessarily reflect the views of the Commonwealth Fund or Johns Hopkins University. The authors wish to acknowledge the assistance of Joel Cantor, of Johns Hopkins University, John Karl Scholz, of the Brookings Institution, and Hinda Rippe Chaikind, of the Congressional Budget Office.

¹ Office of Management and Budget, "Budget of the United States Government, fiscal year 1984."

² Congressional Budget Office, "Changing the Structure of Medicare Benefits: Issues and Options," Congress of the United States (March 1983).

³ Olshburg, P. B. and Moon, M. "An Introduction to the Medicare Financing Problem" for the Conference on the Future of Medicare, Committee on Ways and Means, U.S. House of Representatives, Nov. 29, 1983.

medicare SMI premium with a new income-related premium tax to raise additional revenues while preserving the integrity of program benefits. Under this approach, the HI and supplementary medical insurance (SMI) parts of medicare would be merged into a single program with integrated financing through a single medicare trust fund. Three sources of revenue would be used to finance the program: the existing payroll tax, general revenues, and the new premium tax administered through the income tax system.

The use of an income-related premium tax is only a piece of the solution and should not stand alone. It should be introduced as part of a broader reform of medicare coverage that assures greater financial protection to the elderly and disabled for both acute health and long-term care needs. It should complement efforts to reduce outlays through tighter controls on hospital and physician payment. This approach is offered to contribute toward reducing projected deficits in the HI trust fund, to provide flexibility to finance additional services and improved coverage under medicare for the elderly and disabled, and to assure adequate and stable funding. It preserves the strength of medicare, including universal entitlement to medicare for the elderly and certain groups of disabled, and insures the financial soundness of this essential program.

I. PROBLEMS OF MEDICARE

The medicare program is facing both a pending financing crisis and an increasing inability to protect the elderly and disabled beneficiaries against rising health care costs. Projections of medicare outlays and revenues indicate very large future deficits in the HI trust fund and rapidly rising requirements for the supplementary medical insurance (SMI) trust fund. At the same time, financial protection for the elderly and disabled beneficiaries of medicare is eroding as out-of-pocket expenditures for cost sharing and uncovered services continue to grow.

Medicare is also coming under increased scrutiny because of its impact on Federal spending and on the overall Federal budget deficit. In 1982, medicare accounted for 7 percent of all Federal outlays. Spending under medicare is projected to reach \$112 billion by 1988.⁴ As cuts are made in other components of domestic spending, medicare increasingly becomes a source for budget savings because of the size of its spending and magnitude of its annual increases.

HOSPITAL INSURANCE TRUST FUND DEFICIT

Projections for outlays and income for the HI trust fund show the balances in the HI trust fund will be depleted by 1988 and the fund will accumulate a deficit of \$93 billion by 1995.⁵ These predictions assume that the restrictions on the rate of growth in hospital payments under medicare enacted as part of the Tax Equity and Fiscal Responsibility Act (TEFRA) of 1982 will be continued beyond

⁴ Congressional Budget Office, "Changing the Structure of Medicare Benefits: Issues and Options," Congress of the United States (March 1983).

⁵ Ginaburg and Moon, "An Introduction to the Medicare Financing Problem," Committee on Ways and Means, U.S. House of Representatives, Nov. 29, 1983.

their scheduled expiration in 1986, at a rate of increase equal to the hospital market basket plus 1 percentage point.

The basic reason for the financial crisis in the HI trust fund is clearly rising hospital costs which drain the trust fund reserves. Hospital expenditures account for nearly 90 percent of all HI spending. Hospital costs have been steadily increasing at rates exceeding inflation in the general economy. Cost escalation plus a growing number of elderly and disabled resulted in 18- to 20-percent annual increases in medicare hospital expenditures prior to enactment of the TRA limits in 1982.

Future trends suggest that the financial problems in medicare are chronic. The outlays of the HI trust fund are governed by hospital costs, but the trust fund's income is dependent upon the earnings which the HI payroll tax is applied. Hospital costs have been increasing and are expected to continue to increase at a much faster rate than the wage base for the payroll tax. Hospital costs for medicare beneficiaries are expected to increase at an annual rate of 13.2 percent from 1982 to 1995 while covered earnings are only projected to grow 6.8 percent annually.⁶ The imbalances between the revenues derived from payroll tax contributions by employers and workers and medicare hospital expenditures cause the HI trust fund deficit. A weak recovery or a worsening economy will exacerbate the HI financing problems by diminishing the earnings pool that is tapped to generate income to the trust fund. However, even a vibrant economy would not generate sufficient payroll tax income to match rising hospital expenditures.

The HI trust fund trustees estimate that the payroll tax rate would have to be increased to 4.3 percent to keep the fund solvent over the next 25 years.⁷ The rate is currently scheduled to increase to 2.9 percent in 1986. Thus, the choices to keep the HI trust fund solvent for the next 25 years are to increase the HI payroll tax by 50 percent, reduce HI expenditures by 33 percent by further contracting payment rates to hospitals and physicians or by limiting benefits, or find additional revenue sources. Reductions in program expenditures can be accomplished by paying providers less for covered services, increasing beneficiary cost sharing for services, reducing the scope and utilization of covered services, or, at the extreme end of the spectrum, reducing eligibility for the program by increasing the age for receipt of benefits or making eligibility on some basis other than universal entitlement. Additional revenue sources to support HI could be derived from use of general revenues to support the HI deficit or through the imposition of a new tax or premium.

RISING COSTS FOR THE SMI PROGRAM

The supplementary medical insurance (SMI) trust fund does not face the same solvency problems as the HI trust fund because it has a more flexible financing structure. The SMI trust fund obtains

⁶ Congressional Budget Office, "Prospects for Medicare's Hospital Insurance Trust Fund," and information paper prepared for use by the Special Committee on Aging, U.S. Senate, March 1983.

⁷ Carolyn K. Davis, testimony before Special Committee on Aging, U.S. Senate, hearing on the future of medicare, Apr. 13, 1983.

funds from the premiums paid by beneficiaries and appropriations from Federal general revenues. The law requires that general revenues be appropriated to finance all benefit and administrative costs not covered by the income from premiums.

Although the SMI program faces no immediate funding crisis, its increasing outlays and growing reliance on general revenue financing are of concern because the general revenue spending under medicare contributes to the Federal deficit and is viewed as "uncontrollable entitlement spending" in the context of the Federal budget. SMI outlays account for one third of total medicare expenditures and are expected to increase by 16 percent per year through 1988.⁸ Since the 1972 amendments to the Social Security Act limited SMI premium increases to the percentage increase in cash social security benefits, the share of SMI costs covered by premiums has steadily declined. In 1982, premium payments accounted for only 22 percent of SMI expenditures and general revenues paid 78 percent or \$13.4 billion of the \$17.2 billion in SMI spending.⁹ As a result of recent legislative budget cuts, the premium will be set at a level that covers 25 percent of the incurred costs for 1983 through 1985. Unless the legislation is extended, the premium increases will again be tied to social security cost-of-living increases after 1985, renewing the trend toward greater reliance on general revenues to finance SMI.

The general revenue requirements of the SMI program contribute to the Federal deficit and limit the availability of Federal funds for other purposes. The size of the current Federal deficit and the limits on Federal revenues resulting from the recently enacted tax cuts have created a cut-spending and reduce the Federal budget environment at the Federal level. As discretionary domestic programs for public health, education, and social services are sharply reduced, unbridled increases in medicare SMI spending and the resultant drain on limited general revenues become increasingly unacceptable politically.

FINANCIAL BURDEN FOR MEDICARE BENEFICIARIES

Rising health care costs not only strain the fiscal resources of the medicare program, but also undermine the level of protection against medical expenses provided by medicare to the elderly and disabled. Many elderly and disabled beneficiaries already face serious financial burdens in meeting their health care expenses. In 1981, medicare met only 45 percent of all health and long term care expenditures of the elderly.¹⁰

Medicare beneficiaries incur large out-of-pocket expenditures for services not covered by medicare, such as prescription drugs, dental care, and nursing home care. In addition, medicare's deductibles, cost sharing, and SMI monthly premiums are not inconsequential. The aged spent an average of \$1,154 per person privately on health care in 1981. If nursing home services are excluded, the elderly

⁸ Alice Rivlin, testimony before Special Committee on Aging, U.S. Senate, hearing on the future of medicare, Apr. 13, 1983.

⁹ Carolyn K. Davis, testimony before Special Committee on Aging, U.S. Senate, hearing on the future of medicare, Apr. 13, 1983.

¹⁰ HCFA, unpublished statistics, 1982.

spent \$884 or nearly 10 percent of their mean income on out-of-pocket health expenditures.¹¹

Out-of-pocket spending by the elderly is expected to continue to grow. The Congressional Budget Office estimates that out-of-pocket costs for medicare cost sharing will be \$505 per enrollee in 1984. The SMI premium, cost sharing, and deductible will account for 80 percent of the cost. The SMI premium alone is now \$162 per year. In addition, it is estimated that the average beneficiary will pay an additional \$550 in 1984 for noninstitutional care not covered by medicare, most notably prescription drugs and dental care. If nursing home care were included, it would add another \$650 per person, for a total out-of-pocket cost to the elderly of \$1,705.¹²

The incidence of illness and the financial burden of paying cost-sharing and other out-of-pocket costs for needed care is not related to ability to pay. Out-of-pocket health care expenditures, excluding nursing home care, represent 2 percent of total income in families with incomes in excess of \$30,000 and 21 percent of income in families with incomes less than \$5,000.¹³ Cost sharing requirements by their very design mean that those who are ill and use services bear the burden. The chronically ill and other high utilizers of care are most likely to incur large individual liability for medicare cost-sharing and uncovered services and charges.

The distribution of out-of-pocket medicare program related costs raises serious equity issues for medicare. Should the sick elderly and disabled who rely on medicare financed services be asked to assume an even greater financial burden through increased cost sharing to ease the HI deficit? The poor and especially the near poor elderly already pay a greater share of their income for cost sharing and flat rate taxes such as the SMI premium. Should the less advantaged be further disadvantaged by increased cost sharing and higher premiums?

III. POLICY PROPOSAL

Reform of medicare financing is long overdue. The current artificial distinction between the HI part of medicare and the SMI part of medicare does not contribute to sound fiscal or health policy. Awareness of the soaring increases in SMI expenditures is blocked by concern over projected deficits in the HI part of medicare. Rapidly rising expenditures in both parts of medicare affect the Federal budget and should be of simultaneous concern. Further, there is no real reason why hospital benefits should automatically be made available to the elderly and disabled, but coverage of physicians services should be optional. Both are essential to assuring access to needed health care services for the elderly and disabled. Preferred coverage of hospital care could lead to distortions in the health system, causing some types of care to be rendered in a costly, inpatient setting that could be provided on a lower cost ambulatory basis.

¹¹ Eugene S. Callender, "Medicare: Analysis and Recommendations For Reform," New York State Office on Aging, September 1983.

¹² Congressional Budget Office, "Changing the Structure of Medicare Benefits: Issues and Options," Congress of the United States (March 1983).

¹³ Congressional Budget Office, "Changing the Structure of Medicare Benefits: Issues and Options," Congress of the United States (March 1983).

Reform of medicare should retain its basic objectives. Medicare provides much needed financial protection and access to health care for some of our Nation's most vulnerable citizens. Given that medicare even now covers only 45 percent of the expenditures of the elderly, there would appear to be little room for increasing the share of health expenditures paid directly by medicare beneficiaries. Certainly, medicare should continue to pursue improvements in cost controls or incentives to health care providers to improve efficiency and eliminate unnecessary or ineffective care. But assuring that medicare can continue to provide financial protection to the elderly and disabled in the face of ever-rising health care costs and a growing elderly population will require reforming current methods of financing medicare to assure stable and adequate revenues to support the program.

Sources of revenues which might be tapped to provide additional income to medicare include:

Increases in the HI payroll tax on employers and employees;

Interfund borrowing from the OASDI trust funds;

General tax revenues, largely from the personal income tax and the corporate income tax;

Specific taxes, such as alcohol and cigarette taxes or value-added taxes; and

Premiums paid by medicare beneficiaries.

Each of these alternatives has advantages and disadvantages, and could be tapped to eliminate HI deficits or to support a combined HI-SMI trust fund. The payroll tax is the current method of financing; past deficits have been met by raising the payroll tax rate. It is administratively straightforward and requires no major change in the program. However, the payroll tax is regressive (that is, it represents a higher fraction of total income for lower income individuals than higher income individuals), both because there is a limit on taxable earnings and because interest, dividend, and rent income are not subject to the payroll tax. The share of the Federal budget financed by the payroll tax has risen markedly in recent years, and is widely considered to place an excessive financial burden on workers.

Interfund borrowing would use payroll taxes raised to support social security pensions to relieve pressure on the medicare HI trust fund. Under the 1983 social security financing plan, surpluses will be generated during the late 1980's and early 1990's. These funds could be borrowed to meet medicare deficits. However, this is a short-term strategy. Surpluses under other trust funds will be required to meet pension payments in future years.

The medicare law could be modified to permit supplementation of HI payroll tax contributions with general tax revenues, or to merge HI and SMI into a single trust fund with general tax revenues meeting a greater share of combined expenditures than is now projected. Since general tax revenues come from moderately progressive personal income and corporate income taxes, this source of financing would be more equitable than increases in the payroll tax. With annual Federal budget deficits of \$100 to \$200 billion projected for the immediate future, channeling general tax revenues into medicare would increase the pressure to reduce other governmental expenditures and would not contribute to lessening

the overall budgetary deficit. However, some increase in funding from general revenues, especially in the longer term, is an option for consideration.

The alternative of generating revenues from new taxes such as alcohol and cigarette taxes is discussed elsewhere.¹⁴

PROPOSAL

Reform of medicare financing should guarantee the future solvency of medicare, provide greater flexibility to adapt to changes in the health care system and in the Federal budget, and promote sound health policy through a comprehensive, predictable set of benefits. To achieve these objectives, it is recommended that HI and SMI be merged into a single medicare trust fund. Currently scheduled payroll tax contributions toward the HI trust fund would continue to flow to the new medicare trust fund. General revenues currently projected to pay for SMI expenditures would be added to the medicare trust fund. The current premium paid by the elderly for the SMI program, however, would be replaced by a premium for the entire medicare program.

It is recommended that universal entitlement to medicare benefits be guaranteed for all of the elderly and those disabled covered under current law. SMI coverage would no longer be optional. All medicare benefits would automatically be provided to medicare beneficiaries currently covered under HI. Benefits would not depend upon ability to pay or income of the elderly. Rather a uniform benefit package would be available to all beneficiaries. This recognizes that much of the past success of medicare derives from its universal coverage which fosters program excellence and social solidarity. Further, it guarantees that medicare program administration will not be encumbered with the administrative complexity of income determination, or the potential for an adversarial role toward its beneficiaries.

The new medicare premium, unlike the current SMI premium, would be related to income of medicare beneficiaries and administered through the personal income tax system. The premium would be set at a level sufficient to guarantee the financial solvency of medicare, in combination with other measures such as stringent provider cost controls. It is assumed that every effort would be made to achieve economies in medicare through reasonable cost controls and incentives for health care providers to improve efficiency and eliminate unnecessary and ineffective care. It seems likely that even with such measures that the overall premium for the program would need to increase beyond that of the current SMI premium. However, the income-related feature would avoid undue financial hardship on the most vulnerable of the elderly and disabled. Replacing the current SMI premium with an income-related premium would provide much needed financial relief to those elderly with incomes just above the medicaid eligibility level who find the current SMI premium burdensome.

¹⁴ Long, S., and Smeeding, T., "Alternative Financing Sources" from Conference on Future of Medicare, Committee on Ways and Means, U.S. House of Representatives, Nov. 29, 1983.

Several questions should be raised about any proposal to reform the medicare program.

What is the likely impact of the proposal on the financial soundness of medicare?

What is the likely impact of the proposal on medicare beneficiaries, including the distributional impact by income and on vulnerable groups such as the chronically ill?

Can the proposal be easily administered?

IMPACT ON THE FINANCIAL SOUNDNESS OF MEDICARE

The proposed reform of medicare financing would provide a more flexible approach to guaranteeing the financial soundness of medicare. The combination of revenues from the payroll tax, general revenues, and premiums should provide a stabler source of support. Further if future projections prove inaccurate—for example if the impact of provider cost controls and incentives have a greater or lesser impact on expenditures than predicted—premiums or the contribution from general revenues could be adjusted easily.

Necessary funds to eliminate the deficit could be generated by establishing the premium at the appropriate rate. Table 1 provides preliminary estimates of the impact on the projected deficit of a premium set to yield additional revenues of \$5 billion in 1985—over and above the proceeds from the current SMI premium. This would require an additional average annual premium of \$165 for medicare's 30 million beneficiaries. The proposal, however, would vary the premium with income. On average this would require a premium equal to approximately 2 percent of the income of medicare beneficiaries. It is assumed that the proceeds of this fixed income-related premium would increase at an annual rate of 7 percent after 1985. This takes into account the 2-percent annual increase in the number of elderly as well as conservative estimates of growth in income per medicare beneficiary. In 1995, the premium set again at an average of 2 percent of income of medicare beneficiaries would yield \$10 billion. This premium would reduce the cumulative medicare deficit from \$250 billion in 1995 to approximately \$134 billion.

TABLE 1.—PROJECTIONS OF HOSPITAL INSURANCE TRUST FUND OUTLAYS, INCOME, AND BALANCES

(In billions of dollars)

Calendar year	Outlays	Premium Income	Other H1 Income	Annual surplus	Yearend balance
1985.....	51.2	5.0	53.7	7.5	18.6
1986.....	57.3	5.4	67.3	15.4	34.0
1987.....	64.5	5.8	68.4	9.7	43.7
1988.....	72.5	6.2	68.4	2.1	45.8
1989.....	81.5	6.6	73.0	-1.9	43.9
1990.....	91.7	7.1	77.4	-7.2	36.7
1991.....	103.1	7.6	81.5	-14.0	22.7
1992.....	115.8	8.1	85.6	-22.1	6

TABLE 1.—PROJECTIONS OF HOSPITAL INSURANCE TRUST FUND OUTLAYS, INCOME, AND BALANCES—Continued

(In billions of dollars)

Calendar year	Outlays	Premium income	Other HI income	Annual surplus	Yearend balance
1993.....	130.1	8.7	89.4	-32.0	-31.4
1994.....	146.2	9.3	93.0	-43.9	-75.3
1995.....	164.5	10.0	95.8	-58.7	-134.0

Note: Minus signs denote deficits.

Sources: CBO estimates of outlays and other HI income based on February 1983 assumptions, but updated to reflect the Social Security Amendments of 1983. Authors' estimates of premium income assumes 7-percent annual increase.

If medicare premiums are part of a medicare reform package that includes greater cost controls or incentives to health care providers, the deficit would be eliminated. Table 2 indicates a combined strategy of holding prospective payment of hospitals to an annual rate of increase of hospital market basket inflation plus 1 percentage point (this would require extending the stringency in current legislation out to 1995) and assessing a premium on average set at 2 percent of medicare beneficiary income (over and above the average percent of income currently contributed to the SMI premium). This combined strategy would be sufficient to eliminate the medicare deficit through 1995.

TABLE 2.—PROJECTIONS OF HOSPITAL INSURANCE TRUST FUND OUTLAYS, INCOME AND BALANCES ASSUMING TIGHTER PROSPECTIVE PAYMENT LIMITS AFTER 1985

(In billions of dollars)

Calendar year	Outlays	Premium income	Other HI income	Annual surplus	Yearend balance
1985.....	51.2	5.0	53.7	7.5	18.6
1986.....	57.3	5.4	67.3	15.4	34.0
1987.....	62.1	5.8	68.6	12.3	46.3
1988.....	68.3	6.2	68.7	6.6	52.9
1989.....	75.1	6.6	73.8	5.3	58.2
1990.....	82.6	7.1	78.8	3.3	61.5
1991.....	90.9	7.6	83.7	.4	61.9
1992.....	99.9	8.1	89.1	-2.7	59.2
1993.....	109.8	8.7	94.6	-6.5	52.7
1994.....	120.8	9.3	100.3	-11.2	41.5
1995.....	133.0	10.0	106.1	-16.9	24.6

Note: Minus signs denote deficits.

Sources: CBO estimates of outlays and other HI income based on February 1983 assumptions; but updated to reflect the Social Security Amendments of 1983. These estimates assume that DRG rates after 1985 are increased 1 percentage point per year faster than the increase in the hospital market basket. Authors' estimates of premium income assumes 7-percent annual increase.

Other cost-containment measures might further reduce the need for premium income to the trust fund. For example, if savings were achieved through prospective payment of physicians, the savings in general revenues could be allocated to meeting rising hospital expenditures.

The premium need not be set at a constant rate over time. It could be set at a lower rate initially and gradually increased over time as necessary to assure the ongoing financial solvency of the program.

What should be understood, however, is that the projected medicare deficit is manageable. Simply extending current cost controls on hospitals to 1995 reduces the cumulative deficit to \$93 billion.¹⁶ Part of the deficit comes from interest expenses on the cumulative deficit. Injection of additional revenues at an earlier stage or more effective cost-containment measures can eliminate those interest expenses. Further, the \$93 billion is accumulated over a 10-year period. It should also be noted that future projections are not adjusted for inflation. Growth in incomes and the economy will also take place over this time period, making any given expenditure easier to meet.

IMPACT ON BENEFICIARIES

The impact of an income-related premium on different groups of elderly hinges on the specific manner in which the premium varies with income. Table 3 illustrates the distributional impact of four alternative income-related premiums. The table shows premium payments as a percent of adjusted gross income.

Option 1 is a fixed premium for all medicare beneficiaries with family incomes above \$10,000. No premium would be assessed for those with incomes under \$5,000. Premiums for beneficiaries with incomes between \$5,000 and \$10,000 would be on a sliding scale. Option 2 is a premium set at a constant percent of adjusted gross income. Option 3 is a premium set at a constant percent of taxable income. Option 4 is a premium set at a constant percent of tax liability, that is a tax surcharge.

¹⁶Ginsburg, P., and Moon, M. "An Introduction to the Medicare Financing Problem" from Conference on the Future of Medicare, Committee on Ways and Means, U.S. House of Representatives, Nov. 29, 1983.

TABLE 3.—DISTRIBUTIONAL IMPACT OF ALTERNATIVE INCOME—RELATED PREMIUMS,¹
1985

(Increased revenue as a percent of adjusted gross income)

Adjusted gross income class	Option 1: Fixed dollar premium reduced for poor	Option 2: Premium set at constant percentage of adjusted gross income	Option 3: Premium set at constant percentage of taxable income	Option 4: Premium set at constant percentage of tax liability
Total.....	2.0	2	2.0	2.0
\$0 to \$4,999	0	2	.1	0
\$5,000 to \$9,999	3.7	2	1.2	.4
\$10,000 to \$14,999	4.6	2	2.0	.9
\$15,000 to \$19,999	3.3	2	2.0	1.2
\$20,000 to \$24,999	2.5	2	2.1	1.4
\$25,000 and over	1.0	2	2.1	2.6

¹ Each option yields \$5,000,000,000 in revenues in 1985.

Source: Calculated from Brookings Institution 1980 personal income tax file projected to 1985. Includes effects of 1981 tax act (ERTA) and 1982 tax act (TEFRA), but not the 1983 social security financing plan. Estimates for disabled based on income of taxpaying units with members aged 65 and over.

The fixed premium would be regressive at incomes above \$10,000. That is, it would represent a higher fraction of income for those elderly, say, with incomes between \$10,000 and \$15,000 than for those with incomes over \$25,000. The premium set at a fixed percentage of adjusted gross income is by definition a proportional tax. All elderly would pay the same fraction of income to finance medicare. The tax on taxable income is moderately progressive. Virtually no premium would be charged elderly with incomes below \$5,000; but elderly with incomes above \$10,000 would all pay approximately the same proportion of income toward the program. The tax surcharge is the most progressive method of financing. Under the tax surcharge, elderly with incomes below \$5,000 would pay virtually no premium. Those with incomes between \$5,000 and \$10,000 would pay about 0.4 percent of income; those with incomes between \$10,000 and \$15,000 would pay 0.9 percent of income. By contrast those elderly with incomes above \$25,000 would pay almost 2.6 percent of income.

All of the options for varying the premium with income are more equitably distributed than raising similar revenues from hospital coinsurance charges. Under the premium approach, all elderly (except low-income elderly) would share in the financial burden. Under the hospital coinsurance approach, only those 20 percent of the elderly who are hospitalized would contribute toward reduction of the deficit. Those chronically ill elderly could be faced with quite burdensome contributions under hospital coinsurance. Approximately one-fifth of the elderly at all income levels are hospitalized during a year; average days of care are somewhat higher for lower income elderly. As shown in table 4, raising a comparable level of revenue from hospital coinsurance would place enormous financial burdens on those low-income elderly who were hospitalized. Even if

medicaid were to assume these amounts for the 8.5 million elderly covered under medicaid, serious financial burdens would be felt by those elderly with incomes just above medicaid eligibility. For example, the elderly with incomes between the poverty level and twice the poverty level would pay 16 percent of income for those hospitalized. In addition such individuals would likely incur substantial nonhospital out-of-pocket expenditures. Clearly, as a tax matter coinsurance is the most inequitable form of taxation that could be assessed on medicare beneficiaries.

Premiums, which represent a fixed contribution to medicare, could not be expected to encourage or discourage use of health care services. Thus, they would not pose a barrier to access to needed health care services. Hospital coinsurance, on the other hand, could be expected to reduce utilization particularly for those elderly with modest incomes who do not purchase supplementary private insurance. Very little is known about what types of hospital stays would be eliminated. There is a very real danger that burdensome hospital coinsurance charges would deter necessary care for many vulnerable elderly and quite obviously would place serious financial burdens on a chronically ill group of elderly.

TABLE 4.—DISTRIBUTIONAL IMPACT OF HOSPITAL COINSURANCE, 1977 ¹

Income class	Per- cent ²
Total.....	6.4
Income below poverty level.....	27.1
Poverty to two times poverty level.....	16.2
2 to 4 times poverty level.....	6.2
Over 4 times poverty level.....	2.2

¹ Coinsurance set to yield \$5 billion revenues.

² Hospital coinsurance payments as a percent of income of hospitalized elderly.

Source: Calculated from 1977 National Survey of Medical Care Expenditures, National Center for Health Services Research, U.S. Department of Health and Human Services.

ADMINISTRATIVE FEASIBILITY

Administering an income-related premium would represent a major departure from current administrative practice. Any systematic relationship of premiums to income would require administration through the personal income tax system. Even with this approach, however, certain administrative issues are raised. Low-income elderly who do not now file income tax statements would be required to do so under some variations. Decisions would be required about the definition of income subject to tax—social security pensions, tax-exempt bond interest income, etc. The disabled receiving medicare would need to be identified. Rules governing tax households with both medicare and nonmedicare beneficiaries would need to be designed. All of these issues require resolution, but do not represent insurmountable obstacles. Administration through the income tax system would assure fair and effective com-

pliance without the demeaning administrative procedures that means-tested benefits administered directly by medicare would entail.¹⁶

It would also not engender the complexity and confusion that varying the benefit package with income would create.

IV. SUMMARY

Medicare is an extremely important program assuring many vulnerable Americans necessary protection from the financial hardship that major illness can bring. It is unthinkable that necessary measures will not be taken to assure the financial soundness of the program. Some relief may be possible by adoption of more effective cost controls or incentives for health care providers than have been instituted to date. Even with such measures, however, medicare expenditures are likely to continue to outstrip currently scheduled sources of revenues.

Relying on patient charges for health care services, such as hospital coinsurance, would concentrate payments on the chronically ill, many of whom have extremely modest incomes. Increases in payroll taxes or diversion of funds from general revenues are not promising for the next few years given major increases in payroll taxes that have already occurred and unprecedented deficits in the Federal budget. However, these sources may be more attractive in the 1990's, and could be part of an overall package of financing reform.

To assure the financial soundness of the program, it seems imperative that a fundamental reform of medicare's financing be undertaken. This reform should merge the HI and SMI portions of medicare, with a combined medicare trust fund financed by currently scheduled HI payroll taxes, general revenues currently projected to meet SMI expenditures, and a new medicare premium related to income of beneficiary. The flexibility of altering premiums or general revenue support depending upon requirements of the program, the effectiveness of cost containment measures, and budgetary considerations would be greatly enhanced by a merger of the two parts of medicare.

Reliance upon a premium which varies with income would assure that any financial contribution by medicare beneficiaries is equitably borne and does not place a financial burden on any medicare beneficiary. Unlike hospital coinsurance, it would not provide a barrier to the receipt of care and would not place heavy financial burdens on the chronically ill. With an assured, stable funding base, medicare benefits could be expanded to meet many current gaps in acute and long-term care benefits. If coupled with cost controls on providers, such as extension of current limits on hospital payments and physician fee schedules with mandatory assignment, this financing reform could restore the original promise of medicare to insure adequate health care without the threat of financial ruin for all our Nation's senior citizens.

¹⁶ Hasto, W. and Kelly, N. L. "Restructuring Medicare Benefits" from Conference on Future of Medicare, Committee on Ways and Means, U.S. House of Representatives, Nov. 29, 1983.

MEDICARE FINANCING REFORM

(By JACK A. MEYER, *Director, American Enterprise Institute*)

The analysis of Karen Davis and Diane Rowland is careful, thoughtful, and comprehensive. Their provocative article combines a clear, concise explanation of the problem in financing medicare with a bold proposal that is commensurate with the dimensions of the problem.

My chief concern with the Davis-Rowland paper is that the authors seem to load the entire burden of financing the large projected shortfall in medicare revenues onto the elderly, justifying this step by asserting that this burden is distributed fairly, among the elderly. Adopting what I believe to be an unduly narrow concept of equity, the authors contrast the fairness of their proposal—a single income-related premium covering parts A and B of medicare that could generate enough revenue to bring outlays and resources into line—only with a strawman version of what they call beneficiary cost sharing.

The result is that their analysis has a nice ring of internal equity to it (within the beneficiary group), but is plagued by a failure to address the larger or external equity question: How should the financial burden of meeting the health care needs of a growing elderly population be distributed between the elderly, as a group, and the nonelderly working population that is taxed to support these (and other) needs? A related question is how the needs of the elderly should be balanced against the needs of other groups in society requiring public assistance, particularly nonelderly low-income households.

To address the worker/elderly balance issue, it is necessary to compare policy options involving both benefit reductions and tax increases. In the Davis/Rowland paper, tax options are listed, but quickly dismissed, each for a separate (and sometimes unconvincing) reason. The authors then settle on a "benefit change only" approach that is supported mainly by reciting the drawbacks of beneficiary cost sharing.

Some of the limitations of the cost sharing approach noted by the authors are valid concerns. They fail to mention, however, some of the potentially offsetting advantages of this approach. For example, a fair system of increased cost sharing, by coupling modest daily contributions for routine hospital stays with catastrophic illness protection, could provide incentives for earlier release from a hospital which do not jeopardize health. The authors seem to depict all utilization reductions as dangerous if they are triggered by a greater measure of cost sharing. They also neglect to point out that greater cost sharing, like the premium increases they favor, could be income-related, shielding the low-income elderly from excessive

outlays. By contrasting their premium plan with the harshest version of a cost-sharing approach, the authors seem to bias the choice, even within the restrictive parameters established by their conceptual framework.

The option of gaging cost sharing to income would raise some troublesome administrative problems. Such legitimate concerns, however, are also pertinent to the Davis-Rowland model. Indeed, the authors brush over the administrative pitfalls of their proposal far too quickly. They seem too optimistic about the ease with which their premium plan could be implemented through the Federal tax system.

Moreover, the complications with their use of a premium increase based on some measure of income (that is, adjusted gross income, taxable income) go beyond the pure difficulty of administering such a plan. Their proposal raises basic conceptual issues, as well. For example, basing the insured's contribution to his or her own insurance on any concept of taxable income may establish a criterion for contribution that departs significantly from the ability to pay. A substantial amount of the income of many people 65 years of age or older is not subject to Federal taxation (that is, most social security income, up to recently-enacted limits). In addition, the basic concept of income is somewhat incomplete as a measure of ability of the elderly to pay. Some elderly households have relatively modest income, but substantial assets.

I would combine the best features of the Davis/Rowland proposal with the best features of a cost sharing approach, recognizing that the low-income elderly should be shielded from any additional burden, if not relieved somewhat from present cost sharing responsibility. We should combine benefit redesign with an ability-to-pay criterion to foster a more equitable system, along with improved incentives to economize on the use of health services.

With proper safeguards, such economizing need not jeopardize the access to or quality of care; in any case, concerns about access and quality are not exclusively related to market-like reforms. They hang like a threatening cloud over regulatory squeeze strategies, as well.

Let me stress that benefit redesign should not be relied upon to raise a lot of money. It is basically a fairness measure. But it could be used to reinforce the payment system reforms recently enacted in medicare, such as prospective payment.

Instead, the current benefit structure flies directly in the face of the movement toward prospective payments. While one arm of the Government tries to discourage an extra, unneeded day in a hospital, the other makes the cost of that extra day to the patient zero, except at unusually long-lengths of stay, where cost sharing should be off-limits.

We need to establish both that an extra day in the hospital is not free, and that it is downright unconscionable to be asking beneficiaries to ante up for a major share of the hospital bill after the 60th day of a visit.

Contributions by recipients could be related to their resources in two ways under my approach. First, the expanded premium (parts A and B combined) would be based on ability to pay, as Davis and Rowland propose. Second, the stop-loss provision of the benefit re-

design plan would also be based on ability to pay. The latter feature was proposed by Martin Feldstein a decade ago.

OTHER OPTIONS

We need to ask what other options are available for meeting the growing gap between medicare's expected resources and its expected outlays. I agree with the authors that we should reform the payment system under medicare so as to reduce the gap as much as possible without tax and benefit changes. For this purpose I would rely on measures such as benefit redesign and a voucher system. I am skeptical of the extent to which either extending limits established in the Tax Equity and Fiscal Responsibility Act or the new DRG payment system will actually dent the growth of outlays. But when all the payment system reform is tried, we will still have a sizable shortfall. A key virtue of the Davis-Rowland paper is that it acknowledges the limitations of payment system reform as a means of reconciling outlays and revenues under medicare.

The authors list these major alternatives to their premium increase plan: (1) higher payroll taxes; (2) alcohol and tobacco tax increases; (3) expanded use of general revenues; and (4) inter-fund borrowing. I believe that the first two of these options were too quickly dismissed and that a variation of the third option may have merit. I would not rely on inter-fund borrowing, which would jeopardize the fragile, long-term viability of social security.

The authors mention that increasing payroll taxes would be regressive. Such a judgment must hinge on a comparison to other options, including a status quo option that relies on cost-shifting by hospitals to transfer unreimbursed cost to private payers. My research suggests that continuing to finance the shortfall through cost-shifting is less equitable than the alternatives of explicit taxation (payroll or income).¹ Cost-shifting places a greater burden on working class and lower-middle-income households than either the payroll tax or the income tax.

While a payroll tax increase is more regressive than a personal income tax increase paid by all households, a comparison to an income-related tax on premiums paid only by the elderly is less certain to favor the latter on grounds of equity. In any case, the authors do not present evidence on the relative attractiveness of their preferred option on equity grounds.

Alcohol and tobacco tax increases are ruled beyond the scope of the paper, but should not have been set aside so quickly. Taxes on some alcoholic beverages are higher than others, as a percentage of the purchase price, and a realignment of such taxes that raised revenues could make a contribution to the anticipated deficit in the hospital insurance trust fund. To the extent that higher taxes on tobacco and alcoholic beverages reduced excessive use, some favorable effects on health status and health costs could also be achieved.

I agree with the authors' concern about general revenue financing, which in today's fiscal environment translates into deficit financing. We can ill afford to meet the medicare shortfall by ex-

¹ See Jack A. Meyer, "Passing the Health Care Buck." (The American Enterprise Institute: Washington, D.C., 1983), pp. 10-24.

panding the Federal deficit. I would not favor an income tax surcharge or an income tax rate increase for medicare, but I would encourage a broadening of the Federal income tax base, with a specified portion of the revenue increase earmarked for medicare. A ceiling on the exclusion from employee taxable income of the employer contribution for health insurance is a place to start, but other subsidies could be capped as well, including the open-ended deductibility of mortgage interest and property taxes. In the congressional debate over financing health insurance for the unemployed, both a ceiling on the health care tax subsidy and a tightening of the income averaging provisions of the Federal tax code have been considered as revenue sources. Capping Federal tax subsidies would also be a progressive way of providing some revenue to contribute to the shortfall in medicare, assuming that the tax subsidies chosen are those benefitting primarily middle- and upper-income households.

The combination of benefit redesign and premium increases based on ability to pay will only take us so far in assuring medicare's future. And they should take us only so far. Tax increases should take us the rest of the way, and this is the missing variable in the Davis-Rowland analysis. I prefer more progressive taxes, but maybe we need a blend of alternative revenue sources. We could make a series of adjustments in alcohol and tobacco taxes, payroll taxes, and Federal tax subsidies, and raise a lot of money.

By broadening the personal income tax base and raising excise taxes, we would supplement the type of change the authors urge and, in fact, lighten the burden of such change. Thus, the estimated 4 percent of income required of beneficiaries for premiums under their approach could be cut to 2 percent or so under my approach. Moreover, both subsidy caps and excise tax increases hold the potential for some favorable effects on cost escalation—we could get a double-bang from these measures if they both raise revenues and lead to greater cost awareness.

BROADENING THE FOCUS OF ANALYSIS

The point I wish to emphasize is that while a premium increase may seem less unfair to the elderly than cost-sharing—particularly as the latter is depicted in the Davis-Rowland paper—it may be more unfair than other options that involve a balanced package of benefit changes and revenue-raising measures. Although tax subsidy caps or alcohol and tobacco tax increases would not, per se, provide enough funding to bridge the medicare funding gap, if they are packaged with a modest payroll tax increase and benefit changes, the burden of meeting future obligations could be more equitably distributed.

The authors have not made a convincing case for ruling tax increases off limits. It could be argued that since there is going to be a much higher dependency ratio in the future, we must start now to "renegotiate the social contract." The key idea here is to establish a way to signal today's working population that they are going to have to shoulder more of their own health care costs 10, 20, or 30 years from now because their children will not be able to shoulder the burden. This might argue for placing most (but not neces-

sarily all) of the burden of meeting a future shortfall on the future elderly. But Davis and Rowland have not presented such a case for tilting the burden toward tomorrow's elderly so as to protect tomorrow's workers from an untenable tax burden.

My point here is not to insist on a 50-50 split of the burden, but to suggest that we consciously decide how the responsibility of providing for the health care needs of our future elderly population should be apportioned between future nonelderly workers and future beneficiaries.

Tax increases are not used in the Davis-Rowland proposal to make up any portion of the expected shortfall; that job goes to premiums in their model, and this means that it goes entirely to the elderly. The authors tell us that it goes fairly to the elderly, in the sense that well-to-do senior citizens pay relatively more for their coverage and the healthy elderly pay along with the sick. I share this preference, but stopping here ducks the larger issue and provides an overly narrow view of the well-off population. Note that nonelderly wealthy escape scotfree under the Davis-Rowland model, and this is simply unfair to the elderly.

Of course we must avoid giving the elderly a totally free ride as we tighten our belt—their benefits should not be off-limits any more than those of other groups. But, the authors approach would seem to go toward the other extreme—loading the full burden of the funding gap on nonpoor recipients.

We should be following the lesson of the social security compromise of March 1983. Whatever its limitations, it worked because it balanced the legitimate interests of our senior citizens with the legitimate interests of taxpayers. Each group gave up something. Recipients now have their social security benefits taxed at the margin, and recipients in the next century face a small increase in the retirement age. Taxpayers were subjected to an acceleration in payroll tax increases and other measures. We need an analog of this balance in medicare.

A LARGER PERSPECTIVE

The problems anticipated in medicare financing are a microcosm of the crisis in the total Federal budget. We not only have an under-funded medicare program—we have an under-funded Federal Government. In view of the commitments we have made to a broad spectrum of Government beneficiaries and to our national security requirements, we are an under-taxed society. This is not a plea for a tax increase, but a call for reducing the Federal deficit to a more manageable, safe share of our economy. No portion of the budget should be exempt from trimming. But, Federal outlays are driven by four major spending categories—national defense, social security, health care, and interest on the debt itself; and it will be very difficult to achieve a significantly lower growth path of spending in these categories. As a result, budget control will ultimately require higher taxes.

The health care sector is also a microcosm of a broader fairness problem. In health care we continue to dish out open-ended tax subsidies flowing largely to middle- and upper-income households at the same time as a significant number of our citizens fall be-

tween the cracks of public health care programs and the private health insurance market. The working poor are particularly victimized by cutbacks in Government assistance to low-income households while the unemployed and those out of the labor force who are categorically ineligible for medicaid are also vulnerable.

In recent years budget cuts have been disproportionately concentrated in programs targeted to low-income households. Government programs paying benefits to all economic groups have remained largely intact while tax subsidies have also been left untouched.

Broadening the Federal revenue base and trimming benefits for those who can afford it would yield significant savings that could be used to help those who can least afford the sacrifice required by continued belt tightening.

ALTERNATIVE MEDICARE FINANCING SOURCES

(By STEPHEN H. LONG, *Syracuse University*, and
TIMOTHY M. SMEEDING, *University of Utah*)*

I. THE MEDICARE PROBLEM AND PLAN OF THE PAPER

Projections of outlays and income for the HI trust fund indicate serious financing problems later in this decade. Continued solvency of this program through 1995 will require either outlay reductions that are much larger than any program options currently under discussion, or very substantial increases in revenues.¹

Medicare's hospital insurance [HI] trust fund is openly acknowledged to be in serious financial difficulty, while its supplementary medical insurance [SMI] trust fund is quietly absorbing a growing flow of Federal general revenues. By 1990 HI revenues, based largely upon the payroll tax, will fall short of outlays by 19 percent. Deficits are projected to grow mightily with each passing year, amounting to 37 percent of outlays by 1995, for a cumulative HI trust fund deficit of \$252 billion.² Subject to demographic, utilization, and health care cost forces similar to those underlying the HI trend, SMI outlays are also projected to rise more rapidly than most other economic aggregates (that is, covered wages, on which the payroll tax is based; the Consumer Price Index, to which SMI premiums are indirectly indexed). However, the SMI trust fund is designed to receive Federal general revenue appropriations to cover the gap between premium income and outlays. Though this arrangement shields SMI from any publicly proclaimed crisis, its surging revenue demands are nonetheless worrisome. By 1987 transfers from the general fund for SMI are expected to reach \$31.9 billion, almost triple their 1981 level of \$11.3 billion.³ In sum, there is a Medicare financing problem that is of major proportions now and that promises to escalate well into the next century.

Numerous options are available for correcting the course toward increasing program deficits. Eligibility changes taking the program the few remaining steps toward universal enrollment by the elder-

* Mr. Long is grateful to Jay Crozier and Brenda Spillman for research assistance. Mr. Smeeding thanks Kenneth Baier for research assistance, and Denton Vaughan, Daniel Rodner, and Wendell Primus for providing access to several data sources. Henry Aaron, Wendell Primus, and Emil Sunley are acknowledged for helpful comments on an earlier version of this paper. The authors retain full responsibility for all opinions and any errors.

¹ U.S. Senate, Special Committee on Aging, "Prospects for Medicare's Hospital Insurance Trust Fund," 98th Congress 1st session, March 1983, p. 1.

² Based upon table 1 of the Ginaburg and Moon paper in this volume.

³ U.S. Social Security Administration, Office of Research and Statistics, *Social Security Bulletin*, vol. 46 (July 1983), p. 69, table M-8. Today 74 percent of SMI revenues come from general revenues, the remainder from enrollee premiums.

ly would offer short- to intermediate-run surpluses as revenues from newly covered workers should exceed incremental benefit payments. Benefit reductions, particularly through increased beneficiary cost sharing, would lower future outlays. Reimbursement reform, particularly through prospective payment of hospitals and various physician payment changes, promises to reduce both prices and service quantities paid by medicare. Finally, revising benefits to provide vouchers for private insurance coverage or enrollment in alternative delivery systems might be used to lower outlays, particularly if the resultant competition among insurers and providers results in lower costs for the same quality services. These options are discussed in other papers prepared for this conference.

Despite the wide array of reforms available to lower projected medicare outlays, and despite our support for some of these measures, current estimates suggest that expenditure reductions will be inadequate to fully correct for the HI deficit. It seems clear that the long-term trends imply a continuing need for revenue increases. That is, a balanced medicare reform package is likely to include both expenditure reductions and revenue increases. This paper was commissioned to provide background on part of such a package; specifically, on the principal alternative financing sources for medicare in the coming years. The next section describes the principal sources, carefully distinguishing among taxes placing burdens upon the population in general, and those that burden medicare beneficiaries in particular. The third section discusses the criteria employed in evaluating the alternatives. Then the separate revenue sources are analyzed, with particular attention to their implications for distributive equity. The paper closes with our recommended medicare financing package.

II. THE FINANCING ALTERNATIVES

There are two broad categories of taxation that can be used to support the medicare program: (1) taxes on the general population regardless of age or disability status, and (2) taxes on elderly and disabled beneficiaries. Within the first category we examine the following revenue sources: payroll tax; general revenues; value-added tax; and selected excise taxes.

Within the second category, consisting of taxes on beneficiaries, the following are considered: premiums; personal income tax surcharge; tax on supplementary health insurance premiums; and liens on estates.

Throughout the discussion we abstract from whether a particular new source would be earmarked for the HI or SMI trust funds. This seems warranted since nearly all beneficiaries are enrolled in both parts and surely the Congress takes action on financing one fund with a clear awareness of the other.

One obvious source of medicare financing is an increase in the current HI revenue source, the payroll tax. Currently employers and employees pay 1.3 percent of covered earnings to the HI trust fund. The rate is scheduled to increase further, to 1.45 percent in 1986, and to remain at that level thereafter.⁴ The burden of the

⁴ U.S. Social Security Administration, Office of Research and Statistics, Social Security Bulletin, vol. 48 (June 1983).

payroll tax falls most heavily on younger workers. Thus, at any point in time, it represents an intergenerational transfer. If, however, workers view the HI payroll tax (or any other social insurance tax) as a downpayment on or contribution to their own future medical needs, such contributions may also take the form of an intertemporal transfer. For current retirees, however, given the relative newness of medicare, there is little in the way of intertemporal transfer. At most, a person reaching age 65 in 1983 could have contributed about \$4000 (in 1983 dollars) over his working lifetime.⁵ The present value of expected medicare benefits is several times this amount.

A second financing source is increased general revenue financing. This option is hardly unprecedented, since SMI benefits are already predominantly financed by general revenues. Further, the 1983 social security amendments included several new methods of subsidizing the OASI trust fund from general revenues. However, as noted earlier, SMI demands on general revenues are increasing at a rapid rate, so that placing still further demands on this financing source may be undesirable.

A third source, the value-added tax, was advocated strongly about 6 years ago by Representative Al Ullman, the head of the House Ways and Means Committee, and had been proposed from time to time in earlier years. This flat-rate national consumption tax was considered by some as a substitute for the corporate income tax and by others as a substitute for increased OASDHI payroll taxes. The latter rationale could be employed to justify using a portion of value-added tax revenues for the HI trust fund. The value-added tax also can be supported on the general principle that consumption taxes have potentially beneficial effects on national savings. This is particularly true if the value-added tax is to be a substitute for the income tax.

The final type of tax on the general population to be considered is the excise tax on commodities that affect the general level of health. The commodities considered here are tobacco, alcoholic beverages, and gasoline. Taxes on such products can be viewed as current payments for the higher future medical care costs induced by their consumption.⁶ The relationship between heavy smoking or alcoholism and health problems is well documented.⁷ The adverse health effects of air pollution related to gasoline consumption is less well established, but clearly becoming more important.⁸ If added consumption of gasoline, alcoholic beverages, and tobacco (especially cigarettes) lead to respiratory disease, high blood pressure, cirrhosis, melanoma, and related health problems and if these

⁵U.S. Social Security Administration, Office of Research and Statistics, Annual Statistical Supplement, 1981 (1982).

⁶Christopher J. Zook and Francis D. Moore, "High Cost Users of Medical Care," *New England Journal of Medicine*, vol. 302 (May 1, 1980), pp. 996-1002.

⁷See, for example, the following: Victor R. Fuchs, "Who Shall Live?" (Basic Books, 1974); Philip J. Cook, "Alcohol Taxes as a Public Health Measure," *British Journal of Addiction* (1982), pp. 245-250; A. Klatsky, O. Friedman, and A.B. Sieglau, "Alcohol and Mortality," *Annals of Internal Medicine*, vol. 95 (August 1981), pp. 139-145; and R. Woodson and A. Burchell, "Alcohol and Disease, Economic Aspects," *Annals of Internal Medicine*, vol. 95 (August 1981), pp. 139-145.

⁸See, for example, the following: Erik P. Eckholm, "The Picture of Health: Environmental Sources of Disease" (W.W. Norton, 1977); and Allan V. Kneese and William D. Schultz, "Environment, Health and Economics—The Case of Cancer," *American Economic Review*, vol. 67 (February 1977), pp. 326-332.

health problems lead to higher medicare outlays, a strong case for earmarking these health taxes for the trust funds can be made. Federal excise taxes on liquor remained constant in nominal terms from 1960 to 1980, during which time the real price of liquor fell by almost 50 percent.⁹ Federal excise taxes on cigarettes recently doubled to 16 cents per pack. This increase is scheduled to expire in 1985, however, and the tax will return to 8 cents per pack.¹⁰ Federal gasoline taxes recently were increased by 5 cents per gallon to fund Federal highway refurbishment. However, both the real and relative price of gasoline has fallen in recent years, even including the Federal tax increase. Special excise taxes on these health-endangering commodities are neither onerous nor have they been substantially increased in recent years. As a result, the commodities have lower relative prices which encourage their consumption.

While the current burden of payroll taxes, general revenue finance, the value-added tax, or health taxes would primarily fall on the younger taxpaying public, several alternative forms of medicare finance can be directly levied on current, mainly elderly, beneficiaries. In 1965 when medicare was just beginning, the aged paid 70 percent of their health care bills for all services, including hospital, physician, drug, and nursing home care. In contrast, the elderly pay 37 percent of bills for all medicare services today, the decrease due largely to the medicare program. Proposals to finance the projected shortfall in the trust fund through increased beneficiary payments would reverse this shifting of the medical cost burden, turning it back toward the elderly.¹¹

The first, and most direct, method of raising beneficiary payments is through a flat premium, analogous to uniform premiums paid for voluntary private insurance. Since premiums have fallen from 50 percent of SMI revenues at the program's inception to 22 percent currently, a case can be made for increased beneficiary payments in this form. Comparable to a direct premium would be a plan whereby a voucher is given to beneficiaries, but in a denomination below the actuarial value of current medicare program benefits. While resulting in different dollar flows through the trust funds, premiums, and discounted vouchers can be made equivalent in their burdens of beneficiaries when viewed from a revenue perspective alone. Therefore, vouchers are not considered separately in this paper.¹²

A second approach to beneficiary payments is an earmarked surcharge on the personal income tax payments of elderly—and dis-

⁹ Philip J. Cook, "The Effect of Liquor Taxes on Drinking, Cirrhosis, and Auto Fatalities," in Richard Zeckhauser and Derek Leebaert, eds., "What Role for Government" (Duke University Press, 1983).

¹⁰ "Summary of Present Federal Excise Taxes," prepared by the Joint Committee on Taxation for the Committee on Ways and Means House of Representatives, and the Committee on Finance, U.S. Senate (Feb. 10, 1983).

¹¹ While the share of health care expenses paid by the elderly has decreased, the percentage of income spent by the elderly for health care is higher today than in 1965. Thus while the young pay a relatively larger share of the health care expenses of the elderly, this does not mean that health care expenses are a lesser burden on the elderly today than they were 20 years. See the following: Timothy M. Smeeding, "Alternative Methods for Valuing Selected In-Kind Transfer Benefits and Measuring Their Effect on Poverty", U.S. Department of Commerce, Bureau of the Census, Technical Paper 50 (March 1982); Marilyn Moon, "Changing the Structure of Medicare Benefits: Issues and Options," Congress of the U.S., Congressional Budget Office (March 1983).

¹² See the paper by Friedman, LaTour, and Hughes in this volume.

abled—enrollees. This is simply one example of a broader class of proposed beneficiary income taxes—sometimes cast as "income-related premium," apparently to disguise their progressivity. While another paper being prepared for this conference will address such options in more detail, we explore the income tax surcharge as a polar case to contrast with the flat premium per enrollee.¹³

Among the reform options generally classified as a benefit change is increased cost sharing, though it has clear effects on revenue. The initial impact of cost sharing is quite different from that of a premium—cost sharing is only charged for those who become ill and proceed to use medical services, while a premium is spread over all beneficiaries without regard to their actual utilization experience. Cost sharing is argued to be inequitable, particularly in the case of low-income beneficiaries for whom out-of-pocket costs can be especially burdensome. Yet, owing to the operation of the market in private supplementary insurance, the differences in the ultimate burdens of cost sharing and premiums are not nearly as different as they might appear at first glance. Supplementary insurance premiums paid to avoid increased cost sharing represent an off-budget counterpart to increased medicare premium to support the existing benefit package. On the average, about two-thirds of the elderly have supplementary insurance coverage, the proportion varying from 44 percent in the lowest quintile of the elderly ranked by income (the poorest of whom have medicaid) to between 75 and 79 percent for the higher income half of the elderly.¹⁴ Increased medicare cost sharing might induce additional purchases of supplementary insurance, further narrowing the apparent difference between cost sharing and premiums. Nonetheless, there is evidence that those who presently go without supplementary insurance are not only of lower income, but are more likely to be black and of advancing age.¹⁵ These are compelling grounds for preferring premiums to increased cost sharing.

Unfortunately, in addition to paying those expenditures shifted off budget through cost sharing, private supplementary health insurance increases the on budget costs of medicare by inducing additional utilization. For example, hospital utilization by those with supplementary coverage has been estimated to be 33 percent greater than that of beneficiaries who pay medicare cost sharing.¹⁶ A third source of beneficiary payment that might be used for incremental medicare financing is a tax on supplementary insurance premiums. At a minimum these revenues could be used to compensate the program for the effect of medigap insurance in vitiating medicare's cost sharing. Moreover, one preliminary estimate of the price elasticity of demand for supplementary insurance suggests that for a 10-percent increase in the price, the percent of elderly purchasing supplements will fall by 5 to 6 percent.¹⁷ A sufficiently

¹³ See the paper by Davis and Rowland in this volume.

¹⁴ Authors' tabulations of 1978 Health Interview Survey.

¹⁵ Stephen H. Long, Russell F. Settle, and Charles R. Link, "Who Bears the Burden of Medicare Cost Sharing?" *Inquiry*, vol. 19 (fall 1982), pp. 222-234.

¹⁶ Charles R. Link, Stephen H. Long, and Russell F. Settle, "Cost Sharing, Supplementary Insurance, and Health Services Utilization Among the Medicare Elderly," *Health Care Financing Review*, vol. 2 (Fall 1980), pp. 25-31.

¹⁷ Stephen H. Long and Russell F. Settle, "Medicare Cost Sharing and Supplementary Health Insurance: Selected Research Findings," paper presented at American Public Health Association Meetings, Montreal, Canada, November 1982.

large tax on medigap premiums might, therefore, restore the cost-sharing feature of medicare for a larger share of beneficiaries.

A final revenue source that has just recently come to our attention is a lien program by which a portion of the decedent's estate is taxed to offset medicare benefits paid in excess of previous contributions to the program. It is well known that for many years after the start of a social insurance program expected benefits of retirees far exceed their actual working-year contributions. For married couples benefits can be as much as 12 times the value of contributions. An estate tax on the elderly who leave no surviving spouse (to cover excess medicare expenses of the predeceased spouse as well) could be earmarked for one or both of the trust funds. The burden of this tax falls upon the decedent and the heirs.

III. EVALUATIVE CRITERIA

Four basic criteria will be used to evaluate the various financing methods described above. They are the following: Distributive equity; efficiency and behavioral effects; revenue potential and stability; and administrative and compliance costs.

The first criterion, distributive equity, will be examined from three perspectives. The first and overriding perspective in this analysis is intergenerational equity: Are the young nonbeneficiaries or the principally elderly beneficiaries to bear the greatest burden in losing the financing gap? As many have argued before, this issue of young versus old will continue to increase in importance for social policy decisions as our population ages.¹⁸ A second perspective is that of vertical equity: Do the rich or the poor bear the larger burden relative to their income? If the relative burden increases with income, a tax is progressive; if the burden decreases with rising income, a tax is regressive; and if the burden is a constant percentage of income over all income groups, a tax is proportional. A final perspective on distributive equity is that of horizontal equity—are equals treated equally?

The second criterion, efficiency and behavioral effects, has to do with how imposition of a tax or charge (for example, a medicare premium) can change behavior in an economically efficient or inefficient way. The Rand health insurance study has shown that higher direct consumer payments for health care through various cost-sharing arrangements reduce use of health care services, all else equal.¹⁹ In the context of medicare, such reduced demand could reduce required outlays. Alternatively, a tax could induce avoidance and undercut its own revenue-producing potential. Different taxing strategies also can effect labor supply behavior, inflationary pressures, or savings among the elderly or nonelderly, all of which must be considered in the design of a tax or package of taxes. In the present analysis, measures which have the dual effect

¹⁸ See, for example, Robert H. Binatock, "Federal Policy Toward Aging," *National Journal*, vol. 10 (November 11, 1978), pp. 1838-1846; and Robert B. Hudson, "The Graying of the Federal Budget and Its Consequences for Old Age Policy," *Gerontologist*, vol. 18 (October 1978), pp. 428-440.

¹⁹ Joseph P. Newhouse, et al., "Some Interim Results from a Controlled Trial of Cost Sharing in Health Insurance," *New England Journal of Medicine*, vol. 305 (December 17, 1981), pp. 1601-1607.

of increasing revenues and reducing excessive demand for health care services are particularly appealing.

The third criterion is revenue potential and stability. Some taxes may not have large enough bases to cover the medicare deficit alone and may be useful only in combination with other measures. Others, such as the payroll tax, may be particularly sensitive to the state of the economy. They may be useful only as part of a portfolio of taxes that balance cyclical impacts. For instance, at present each 1 percent increase in unemployment reduces HI payroll tax income by \$1 billion.

The final criterion, administrative, and compliance costs, is critical to the practicality of various taxes or charges. An increase in an existing tax or a tax to be collected through an existing structure may have little or no marginal cost. A tax that requires a new or enlarged collection or enforcement structure may cost more than can be justified by its revenue potential.

IV. ANALYSIS OF REVENUE SOURCES

DISTRIBUTIVE EQUITY

To illustrate the distribution of financing burdens from each source—particularly their intergenerational and vertical equity—we simulated \$5 billion of incremental medicare payments in 1975. These simulation parameters were chosen for several reasons. First, the general tax simulator available to us was calibrated for the 1975 income year to employ the unusually rich data from the 1976 survey of income and education.²⁰ Second, the most recent consumer expenditure survey, upon which the consumption taxes were based, is for 1972-73, while the supplementary insurance tax is based upon data from the 1978 health interview survey. Rather than age all of the microdata forward, with all the problematic demographic and economic assumptions that would involve, we proportioned future revenue needs to 1975. Specifically, the 1995 HI trust fund deficit represents 37 percent of program outlays. The \$5 billion chosen here is 43 percent of 1975 HI outlays, making the relative burdens approximately equal. Moreover, the \$5 billion figure is a round number, easily proportioned by analyst to reflect any current or future revenue total desired. (Also note that \$5 billion in 1975 is approximately equal to \$10 billion in 1985 prices.)

²⁰The tax simulations are based upon the following incidence assumptions. Payroll taxes, both the employee and the employer shares, are assumed to be borne by wage-earners. Personal income taxes are the burden of the payer. General revenues are a weighted average (based upon historical proportions) of personal income taxes, corporate income taxes, and excise taxes. The burden of corporate taxes was distributed to all forms of property income, while excise taxes were assumed to fall on consumers in proportion to their disposable personal income. The value added tax burden was allocated in accord with total expenses for current consumption. The selected excise taxes were assumed to be ad valorem taxes, the burden proportionate to consumer spending on the respective commodity. (Present federal excise taxes are specific, but data limitations required this simplifying assumption.) Premiums were allocated in accord with the number of elderly persons in each family and it is assumed that their burden cannot be shifted. Supplementary insurance taxes were allocated in equal amount to each Medicare beneficiary having a supplementary insurance policy. (This is a simplification necessitated by lack of data on premium amounts.) The population base is the civilian, noninstitutionalized population of the United States, where unrelated individuals are included as a separate "family" unit.

Details of these methods and data are described in Janet L. Johnson and Stephen H. Long, "General Revenue Financing of Medicare: Who Will Bear the Burden?" *Health Care Financing Review*, vol. 8 (March 1982), pp. 19-20.

Tables 1-8 summarize the principal findings for each financing source, excepting liens for which there is a separate table due to data incompatibilities. Each table displays results for seven revenue sources, first for all families and then separately for families headed by a nonelderly person and those headed by an elderly individual.

TABLE 1.—DISTRIBUTION OF \$5 BILLION INCREMENTAL FINANCING UNDER ALTERNATIVE REVENUE SOURCES

(Dollars per family by age of family head and family income)

Family income quintile	Taxes on wages, income, or consumption				Taxes on beneficiaries		
	Payroll tax	General revenues	Value-added tax	Selected excise taxes	Premiums	Personal income tax surcharge	Supplementary insurance tax
ALL FAMILIES							
All.....	64	64	64	64	64	64	64
1.....	6	4	27	25	104	(¹)	86
2.....	27	18	43	48	99	11	107
3.....	62	41	60	64	51	37	56
4.....	96	72	78	83	34	64	38
5.....	130	186	109	101	33	208	34
NONELDERLY HEADED FAMILIES							
All.....	76	69	70	74	7	(²)	7
1.....	9	3	.....	.....	3	(²)	2
2.....	36	17	.....	.....	5	(²)	6
3.....	69	39	.....	.....	6	(²)	7
4.....	100	69	.....	.....	8	(²)	8
5.....	134	178	.....	.....	10	(²)	11
ELDERLY HEADED FAMILIES							
All.....	15	45	38	28	306	334	303
1.....	1	5	.....	.....	264	0	218
2.....	6	22	.....	.....	332	39	359
3.....	21	52	.....	.....	335	275	367
4.....	46	99	.....	.....	334	783	366
5.....	77	293	.....	.....	340	3039	358

¹ Less than 0.50.

² Due to data limitations, the surcharge was not applied to the small number of beneficiaries in nonelderly headed families.

TABLE 2.—DISTRIBUTION OF \$5 BILLION INCREMENTAL FINANCING UNDER ALTERNATIVE REVENUE SOURCES

[Burden as a percent of family income by age of family head and family income]

Family income quintile	Taxes on wages, income, or consumption				Taxes on beneficiaries		
	Payroll tax	General revenues	Value-added tax	Selected excise taxes	Premiums	Personal income tax surcharge	Supplementary insurance tax
ALL FAMILIES							
All	0.48	0.48	0.48	0.48	0.48	0.48	0.48
1 .....	.22	.15	1.00	.95	4.02	.01	3.33
2 .....	.41	.27	.63	.67	1.49	.17	1.61
3 .....	.56	.37	.52	.56	.46	.34	.50
4 .....	.58	.43	.47	.50	.21	.39	.23
5 .....	.44	.62	.37	.35	.11	.70	.12
NONELDERLY HEADED FAMILIES							
All .....	.52	.47	.48	.50	.05	(¹)	.05
1 .....	.37	.13	.....	.....	.11	(¹)	.09
2 .....	.53	.25	.....	.....	.08	(¹)	.09
3 .....	.61	.35	.....	.....	.06	(¹)	.06
4 .....	.60	.41	.....	.....	.05	(¹)	.05
5 .....	.45	.60	.....	.....	.03	(¹)	.04
ELDERLY HEADED FAMILIES							
All .....	.18	.54	.51	.38	3.67	4.01	3.64
1 .....	.03	.18	.....	.....	9.18	.01	7.60
2 .....	.09	.34	.....	.....	5.14	.61	5.56
3 .....	.20	.48	.....	.....	3.08	2.53	3.37
4 .....	.28	.60	.....	.....	2.04	4.77	2.23
5 .....	.24	.90	.....	.....	1.05	9.37	1.11

¹ Due to data limitations, the surcharge was not applied to the small number of beneficiaries in nonelderly headed families.

TABLE 3.—DISTRIBUTION OF \$5 BILLION INCREMENTAL FINANCING UNDER ALTERNATIVE REVENUE SOURCES

[Index of relative burden as a percent of family income, by age of family head and family income]

Family income quintile	Taxes on wages, income, or consumption				Taxes on beneficiaries		
	Payroll tax	General revenues	Value-added tax	Selected excise taxes	Premiums	Personal income tax surcharge	Supplementary insurance Tax
ALL FAMILIES							
All	100	100	100	100	100	100	100
1	46	31	208	196	838	2	694
2	85	57	132	139	310	35	350
3	116	77	109	117	96	71	105
4	120	90	97	104	43	81	47
5	91	130	77	73	23	146	24
NONELDERLY HEADED FAMILIES							
All	109	98	100	104	10	(¹)	10
1	76	27	—	—	23	(¹)	19
2	111	52	—	—	17	(¹)	19
3	128	74	—	—	12	(¹)	13
4	125	86	—	—	10	(¹)	11
5	94	125	—	—	7	(¹)	7
ELDERLY HEADED FAMILIES							
All	37	113	106	79	763	100	759
1	7	37	—	—	1,912	(²)	1,583
2	19	70	—	—	1,071	15	1,157
3	41	100	—	—	642	63	703
4	59	126	—	—	424	119	465
5	49	188	—	—	219	233	230

¹ Due to data limitations, the surcharge was not applied to the small number of beneficiaries in nonelderly headed families.

² Less than 0.50

Separate calculations have been made for quintiles of the all-family income distribution, where "1" refers to the lowest 20 percent of the families. Table 1 measures the absolute dollar burden per family. Table 2 expresses this burden as a percent of family income—that is, as a tax rate on income from all sources—while table 3 displays an index number reflecting this burden relative to the average percent of income paid by all families (=100). Excise taxes on alcoholic beverages, cigarettes, and gasoline, discussed individually below, have been aggregated into a single tax column for purposes of tables 1-3. While data limitations prevented calculation of separate income quintile specific consumption tax burdens for elderly and nonelderly headed families, average burdens for all income levels in each family group are shown.

Table 1 shows that \$5 billion of incremental medicare financing represents an average burden of \$64 per family. The all-families section of the table reveals the contrast in vertical equity between general taxes on income and consumption, where absolute burdens rise with higher income, and premiums and premium taxes, where burdens fall as income rises. Among the general taxes, consumption levies take about five times as much revenue from the lowest income quintile as do income and payroll taxes, largely because the latter sources do not tax cash transfer income and because of personal exemptions and deductions in the personal income tax.

Comparing burdens for nonelderly and elderly headed families provides insight into intergeneration equity issues. While the general taxes on wages and income apply to the wide group of income recipients, their burdens on the elderly are not insubstantial. This is particularly true of general revenues under which the elderly's property income for example, interest, dividends, taxable pensions) is taxed. In this case, the average burden on elderly headed families is \$45, or 70 percent of the average for all families. Payroll taxes impose a considerably smaller burden upon the elderly—only one-third that of general revenues—as a consequence of their limited dependence on earned income. The average nonelderly payroll tax burden is five times that of the elderly (\$76 versus \$13). In contrast to the findings on general taxes, the three beneficiary tax sources weight almost exclusively on elderly headed families. Particularly striking is the pattern of burdens under the beneficiary personal income tax surcharge. The variation about the mean burden of \$334 become nearly confiscatory in the highest quintile. There the average payment of \$3,039 is nearly 10 times the burden of a flat-rate premium in the same quintile. The extreme progressivity of this source is not merely the result of a progressive rate structure, but also the result of the large amount of untaxed income in the lower quintile, while incremental income in the higher quintiles is largely taxable. If this extreme burden at high incomes were viewed as undesirable, it could be corrected by setting a ceiling on the income tax surcharge equal to some proportion of the actuarial value of medicare benefits.

A common approach to evaluating vertical equity is to compare the percent of income taxed away, since family income from all sources is a measure of ability to pay. The \$5 billion of incremental financing represents a tax of 0.48 percent (table 2) on the average family's income of about \$13,300 in 1975. General revenues and the beneficiary personal income tax surcharge are clearly the most progressive sources, as indicated in table 3, where burdens in the top quintile are 130 and 146 percent, respectively, of the average for all families. The payroll tax also reflects progressivity in the lower quintile, where a greater proportion of income is from untaxed nonwage sources. Yet, moving from the fourth to the highest quintile, this tax becomes regressive as its burden falls from 120 to 91 percent of the mean (table 3), reflecting the effects of workers reaching the ceiling wage and the larger proportion of nonwage income among the rich. Displaying a common profile, the value-added tax and the selected excise taxes are clearly regressive, taxing 1 percent of income in the lowest income group and only about one-third as large a proportion of income in the highest quin-

tile. Yet the greatest regressivity over all sources is displayed by the two premium taxes. The pattern shown by the flat premium is tempered slightly in the case of the supplementary insurance premium tax, where there is a small supplementation rate in the lowest income quintile. This is not to say that all revenue sources should necessarily redistribute income; a strong case can be made for premiums and for taxes on supplementary insurance using benefit grounds.

The distributive effects of three selected excise taxes on unhealthy commodities are compared in table 4. In each case, the absolute spending rises with income, but not rapidly enough to keep from falling as a percent of income.

TABLE 4.—DISTRIBUTION OF \$5 BILLION INCREMENTAL FINANCING UNDER SELECTED EXCISE TAXES ON UNHEALTHY COMMODITIES

(Burdens by family income, all families)

Family income quintile	Dollars per family			Percent of family income			Index of relative burden as a percent of family income		
	Alcoholic beverages ¹	Cigarettes ²	Gasoline ³	Alcoholic beverages	Cigarettes	Gasoline	Alcoholic beverages	Cigarettes	Gasoline
All	64	64	64	0.48	0.48	0.48	100	100	100
1	20	35	22	.72	1.29	.81	150	270	170
2	42	53	43	.61	.76	.63	127	159	132
3	59	67	66	.52	.59	.57	108	123	119
4	81	81	87	.49	.49	.52	102	102	109
5	117	83	103	.40	.28	.36	83	59	74

¹ Includes liquor, beer, and wine consumed at home, in restaurants and drinking establishments, and liquor consumed during recreation.

² Includes other tobacco products as well.

³ Distributed according to gasoline consumption (or vehicle use), including recreation usage (73 percent); and according to total consumption (27 percent) for household gasoline usage.

Source: 1972-73 "Survey of Consumer Expenditures" (U.S. Bureau of Labor Statistics, 1978), adjusted to 1975 dollars for consistency with tables 1-3.

While all three are regressive financing mechanisms, cigarettes are clearly the most regressive with the lowest income group facing effective tax rates over two and one-half times as great as those of the average family. The gasoline tax is the second most regressive tax, followed by the liquor tax, which was least regressive. Any set of excise taxes violates the principle of horizontal equity to the extent that some families consume massive amounts of the taxed products as compared to others who consume none. Yet horizontal equity is a much less important evaluative criterion when the tax is aimed on efficiency grounds specifically at those who consume large quantities of the taxed product.

The last financing source considered is liens against the estates of the elderly whose lifetime medicare outlays exceeded the value of their lifetime medicare contributions. This would effectively turn into an estate tax on the surviving spouse at the time of his or her

own death. Using data provided by the Social Security Administration, table 5 computes the distribution of lien burdens according to money income quintile.

TABLE 5.—DISTRIBUTION OF \$5 BILLION INCREMENTAL FINANCING UNDER LIENS ON ESTATES

[Burdens per estate and per family income, elderly families only]

Family income quintile	Average net worth ¹	Average dollar burden	
		Per taxed estate ²	Per family ³
All.....	\$58,768	\$12,224	\$334
1.....	23,028	4,790	132
2.....	55,125	11,466	314
3.....	83,471	17,362	477
4.....	93,316	19,410	530
5.....	173,132	36,011	988

¹ Based upon 1979 data, adjusted to 1975 dollars for consistency with tables 1-3. Net worth includes all tangible wealth: homes, stocks, bonds, annuities, businesses, etc., but excludes pension wealth.

² Assumes that 4 percent of elderly families are terminated each year by death of the surviving spouse.

³ Calculated as a constant percent of average net worth with no adjustment for estate transfer prior to death of the surviving spouse. The tax rate was calculated by dividing the \$5 billion revenue requirement by aggregate net worth.

Source: 1979 Income Survey Development Panel, Office of Research, Statistics, and International Policy, Social Security Administration.

As one would expect, the net worth of the elderly is both sizable and increases dramatically with income. The average dollar burdens per family, which are calculated as a constant percent of average net worth, are less interesting than the average dollar burden on taxed estates. Here we have assumed that 4 percent of the elderly families in each quintile experience the death of the surviving spouse in any given year. This raises the flat effective tax rate on taxed estates only to 21 percent. To the extent that surviving spouses have average estate values below those of the general population, the tax rate would have to be raised.

Table 6 summarizes the above findings on distributive equity for the major financing sources. The remaining portions of this section address the other evaluative criteria and also are summarized in table 6.

TABLE 6.—CRITERIA FOR EVALUATING REVENUE SOURCES

Framing source	Distributive equity		Efficiency/behavioral effects	Revenue potential and stability	Administration and compliance
	Intergenerational equity	Vertical equity				Horizontal equity
Payroll tax	Burden falls on all workers—i.e., principally on the nonelderly.	Essentially proportional to wage income, but regressive relative to total income.	Some differences for families with non-wage income and for multiple earner families. Adjusts for family size	Large revenue base; cyclical with employment.	Collection system in place.
General revenues	Burden falls on wide income base, including property.	Progressive	Adjusts for family size	Larger revenue base; cyclical with employment.	Collection system in place
Value-added tax	Burden falls on all consumers.	Regressive	Makes no adjustment for family size	Larger revenue base; Stable relative to income.	Requires new collection and enforcement structure.
Selected excises	Burden falls on users of taxed commodities.	Regressive for any level of use; poorer consumers pay relatively more.	Unequal burden across families, rising with use of taxed commodities.	Any one alone could meet Medicare revenue needs, but with substantial product price increases.	Collection system in place, but some design problems would need to be faced.
Premiums	Burden falls on elderly and disabled beneficiaries.	Regressive except at lowest income levels, where Medicaid pays the premium.	All beneficiaries are treated the same.	Large tax base	Collection system in place
Income tax surcharge	Burden falls on elderly and disabled beneficiaries.	Highly progressive as the result of rate structure and increasing proportion of income taxable at higher income levels.	Different treatment based on income sources.	Large tax base	Straightforward if levied on currently taxable income; some additional costs if applied to a broader base.
Supplementary health insurance tax	Burden falls on elderly and disabled who buy supplemental insurance.	Progressive to the extent that insurance purchases rise with income.	Burden varies according to amount of supplemental insurance bought.	Reasonable levy may fall short of Medicare revenue needs.	Collection from insurers, possibly through contracts with state health insurance commissions.

Captures revenues to compensate program for health care demand induced by insurance that covers medicare cost-sharing.

TABLE 6.—CRITERIA FOR EVALUATING REVENUE SOURCES—Continued

Financing source	Distributive equity		Efficiency/behavioral effects	Revenue potential and stability	Administration and compliance
	Intergenerational equity	Vertical equity			
Uien on estates	Burden falls on some elderly beneficiaries and their heirs.	Proportional to wealth.	Horizontal equity: Burden falls equally on equally-sized estates. Efficiency/behavioral effects: May induce some inter-vivos transfers; captures more tax from those who place heavier demand on the health care system.	Large tax base	System in place for currently taxable estates; additional assets if other estates are included.

EFFICIENCY AND BEHAVIORAL EFFECTS

In general, it can be expected that increases in general revenue financing or in payroll taxes would have potential impacts on employment, inflation, and savings. In particular, a payroll tax increase could be expected to affect the short-run demand for labor if the burden could not be shifted immediately backward to employees. Alternatively, the burden might be shifted forward to consumers in higher product prices, generating inflationary pressure. Increased general revenue financing potentially could serve as a disincentive to work and savings. Although the incremental demands placed on the payroll tax and on general revenues by medicare alone are not worrisome, they are only two of several sources of increasing pressure, the combined effect of which is cause for efficiency worries. Incremental impacts could be reduced if either financing method were used as part of a carefully designed portfolio of taxes. For example, there might be no net impact on savings if general revenue financing was combined with a value-added tax, which is assumed to have a stimulating effect on savings. It is important to note one final behavioral impact of a payroll tax increase and to a lesser extent general revenue financing. There has been a growing trend for employees to accept compensation in the form of noncash benefits. Increased taxes on cash wages could intensify this trend.²¹ Such an effect would erode the base of either tax.²²

Potential behavioral impacts of excise taxes are more significant. Reliance on an alcoholic beverage tax alone to close the medicare financing gap would have raised the price of alcohol by 28 percent in 1975. Sole use of the cigarette excise would have resulted in a price increase of 44 percent. Of course, if each tax were employed to yield half the necessary revenues, the respective price increases would be halved. To the extent that such taxes reduce consumption, they could be expected to both reduce future health care demands by improving health and to increase future demands on medicare by increasing lifespan. However, even if consumption were to be reduced, health impacts would be realized only in the long run, perhaps not until the next century. More pertinent to the discussion at hand is the principle of benefit taxation. Such taxes place a larger burden on those whose behavior contributes most to increased demands on the health care system. Moreover, the tax has a voluntary character: It can be escaped by a choice to forgo the taxed behavior.

The efficiency and behavioral impacts of the measures that affect beneficiaries only are somewhat more varied. Premiums have no behavioral impact since they affect all beneficiaries identically and

²¹ Yung-Ping Chen. "The Growth of Fringe Benefits: Implications for Social Security," *Monthly Labor Review*, vol. 104 (November 1981), pp. 3-10.

²² Alternatively, a cap on income tax-free employer health insurance contributions (or certainly full taxation of these benefits) could help medicare in several ways. First, about one quarter of the elderly's supplementary health insurance policies are paid by current or former employers. Making employer health insurance benefits part of the tax base would, therefore, represent an indirect tax on supplementary health insurance premiums. Second, to the extent that such taxation leads to reduced health insurance coverage among all age groups, lower demand for medical care in general might imply lower prices for medicare services in particular. Finally, income taxable employer-paid health insurance premiums would presumably become part of the medicare HI payroll tax base, thereby directly increasing medicare revenues.

cannot be avoided. The income tax surcharge is another matter. Because of its highly progressive character, it could provide disincentives to work and savings—both of which generate taxable income—for elderly taxpayers in higher income brackets. Liens on estates may induce beneficiaries to reduce their taxable estates by transferring assets to their heirs. However, even though inter-vivos transfers currently carry substantial tax advantages, they have not been a significant tax problem.

From the benefit taxation perspective, both the supplementary health insurance tax and liens on estates have the advantage of taxing more heavily those who place higher demands on the health care system. To the extent that supplemental health insurance taxes reduce demand for such coverage, they also will expose a larger segment of the beneficiary population to medicare cost-sharing. This, in turn, could be expected to reduce utilization of health care services and thus medicare outlays. Of course, the cost of any such result in terms of the health status of beneficiaries is an important consideration. Any impact of liens on health care utilization rests on an assumption that the elderly would be willing to curb expenditures on health in order to leave a larger estate after taxes. To the extent that the assumption is valid, liens have the potential to reduce future medicare outlays.

REVENUE POTENTIAL AND STABILITY

In general it can be assumed that tax bases for payroll tax increases, general revenue financing, the value-added tax, medicare premiums, as income tax surcharge on recipients and liens on estates are sufficiently large to handle revenue needs of the magnitude being discussed, either alone or certainly in combination with other revenue sources. However, the sensitivity of general revenues and payroll tax income to changes in employment suggest the desirability of using either as part of a balanced portfolio of taxes. The value-added tax has the advantage of being levied on consumption, which is stable relative to income.

By contrast, either a selected excise tax or a supplementary health insurance tax might present problems as the sole method of closing the medicare financing gap. The use of any single excise to meet medicare needs would result in an extremely large product price increase, though distributing the burden over two or more unhealthy commodities would have a much lesser effect on any single product price. Any reasonable levy on supplementary health insurance purchases would be likely to fall short of revenue needs.

ADMINISTRATION AND COMPLIANCE

The simplest and least costly financing methods with respect to administration and compliance are the payroll tax, general revenue financing, selected excises, and medicare premiums. Well-developed collection systems already are in place. Income tax surcharges for beneficiaries and liens on estates would have similar straightforward administration and low cost if levied only on beneficiaries who currently file income tax returns and estates that currently are taxable. If, however, the surcharge were to be applied to the broader category of all medicare beneficiaries, additional

costs would be incurred to bring those who do not currently file into the system. Similarly, additional costs would be incurred to identify and tax estates not currently taxable. Coordination with State estate or death tax offices and probate courts is a possibility, but higher costs are inevitable given the sheer volume of formerly untaxed estates that would be brought into the system. Similar coordination with State health insurance commissions could simplify administration and reduce the cost of imposing a supplemental health insurance tax. Collection would be from insurers, possibly through contracts with state commissions. The most problematic and costly financing measure from the administration and compliance perspective is the value-added tax, which would require a new collection and enforcement structure. On the other hand, a change to the value-added tax would likely be part of a major restructuring of Federal tax policy going far beyond the medicare financing problem.

V. A PROPOSED MEDICARE FINANCING PACKAGE

It seems clear that the future of medicare will be one of continual tension between efforts to control ever rising expenditures, on the one hand, and reluctant imposition of greater revenue demands on taxpayers and beneficiaries, on the other. The estimates provided in the Introduction to this conference volume suggest that stringent hospital reimbursement controls may reduce the cumulative HI deficit in 1995 from \$252 billion to \$93 billion. Impressive as the prospects for these savings may be, there remains a sizable HI deficit and growing SMI spending pressures that must surely be filled by additional financing. The above sections of this paper have presented a menu of alternatives considered, for analytical purposes, one by one from the perspective of several criteria. Yet in practice no single revenue source is likely to satisfy all evaluative criteria, let alone satisfy all constituencies to the debate. Therefore, medicare financing policy is likely to take shape through packages of options. The purpose of this concluding section is to suggest a package we prefer and to briefly state some supporting arguments.

The principle guiding the design of this package is that contributions to incremental financing requirements be shared by beneficiaries and the general taxpayers. To merely raise payroll taxes and general revenue contributions, following past practice, seems too heavy a burden on general taxpayers. Since the medicare program began the relative share of beneficiary payments, through SMI premiums, has fallen from 50 to 22 percent of total outlays of that trust fund. Yet over this same period the economic status of the elderly has increased substantially relative to that of the general population.²³ Thus, in general, elderly medicare beneficiaries can afford to pay more for their health care than they are now paying.

The beneficiary portion of our proposed package comprises two revenue sources: A tax on supplementary insurance premiums and

²³ See, for instance, B. Danziger, *et al.*, "Income Transfers and the Economic Status of the Elderly," presented to the NBER Conference on Research in Income and Wealth (Madison, Wisconsin, May 1982) or Michael O. Hurd and John B. Shoven, "The Economic Status of the Elderly: 1969-79," presented to the NBER Conference on Research in Income and Wealth (Baltimore, Md., December 1983).

an increased beneficiary premium. Medicare was initially designed with certain cost sharing requirements in order to impose some economic discipline on beneficiaries and their providers, a feature common to private insurance plans at the time. The subsequent spread of supplementary insurance, medigap, policies vitiates medicare cost sharing requirements and leads to higher program outlays as those who supplement use higher amounts of covered services. While it is not reasonable to ban supplementary insurance, it is reasonable to tax its purchasers for the spillover costs to the medicare program. We propose a premium tax on supplementary policies in amounts consistent with these spillover costs. Any remaining revenue requirements of beneficiaries should be met through increased beneficiary premiums. This is consistent with a move toward restoration of the original beneficiary role in medicare financing. Our preference is for equal per beneficiary premiums; the lowest income beneficiaries exempted through medicaid payment, of course. While income tax surcharges represent a more progressive alternative, we see no justification for redistribution of this benefit tax burden among the elderly so that those with higher income pay substantially more.

The general taxpayer portion of our proposed package would come from increased Federal taxation of alcoholic beverages and cigarettes, these revenues earmarked for the HI or SMI trust funds. These taxes have generally remained constant in nominal terms for too long, thus lowering the relative prices of the commodities and effectively encouraging their consumption. Increasing cigarette and alcoholic beverage prices by about 10 percent each would generate substantial revenue. Those who continue to overconsume these commodities will in effect contribute more now to offset their expected higher future demands on the health care system. Moreover, the taxes are good health policy, to the extent that they discourage consumption of these harmful commodities.

In summary we have reviewed the potential sources of increased finance to make up the expected future deficits in the medicare trust funds. Should recently enacted or proposed cost-cutting efforts for medical care in general or for medicare in particular be successful, less reliance on increased revenues will be needed. We would applaud such changes. However we do not expect that outlays will be curtailed enough to forestall the need for new medicare revenues within the next decade. If our expectation is correct, we hope that this analysis will help policymakers in selecting a fair and efficient set of revenue instruments to meet the medicare deficit.

COMMENTS ON "ALTERNATIVE MEDICARE FINANCING SOURCES"

(By HENRY AARON, *The Brookings Institution*)

When a problem is complex, we usually try to break it down into separate pieces each of which can be analyzed more easily than the whole. The medicare financing problem surely qualifies as complex. Both analytically and politically it is orders-of-magnitude more challenging than the social security financing problem which livened up Christmas and New Year's a scant 12 months ago.

The piece of the problem that Stephen H. Long and Timothy M. Smeeding examine is the menu of ways to increase revenue flowing to the medicare trust funds. I believe that they have done a solid job in carrying out his task and shall have a number of comments on their specific results.

But there is always a danger in pursuing the strategy of breaking up complex problems into bite-size pieces. The connections and interdependencies among the various pieces may be overlooked or underemphasized. So I shall begin my comments with some remarks that touch the Long-Smeeding paper only tangentially before turning to their specific results. I have no reason to think that they would disagree with any of my obiter dicta.

I

The central point about the medicare problem is that it must be dealt with. This requirement is political, not legal. Congress could deal with the medicare problem, as it could have handled the social security financing problem, by authorizing the trust funds to borrow from the Treasury and to run negative balances. That course was not followed last year, and it will not and, in my view, should not be followed for medicare. That means that either benefits will be cut or revenues flowing into the funds will be increased. Some moves in one direction or the other or both must be made before the end of this decade. On narrow medicare grounds, however, no steps have to be taken immediately.

The corollary of this observation is that the environment within which decisions about medicare are taken will be defined by whether or not Congress and the President find some way to close the overall budget deficit before the big decisions on medicare are taken. The fact is that cuts in medicare spending can make only a small contribution in the next 2 or 3 years to closing the overall deficit, unless medicare is scuttled. If the deficit is reduced to manageable levels by, say, fiscal year 1989, the debate on medicare is likely to take place as part of a broad national examination of how we wish to organize and pay for the delivery of medical services. If the overall deficit lingers at or near its current size, the debate on

medicare will inevitably be enveloped in a continuing effort to bring overall Federal spending and taxes into line.

The difference between these two points of view is profound. If the overall deficit has been narrowed, we can begin from the recognition that most of our methods of paying for medical care, public and private, encourage the provision of all services promising any benefit, even benefits that cost far more than they are worth. Beginning from this understanding allows us to recognize that the nature of the problems that medicare faces are no different from the issues that we face in deciding how to organize and pay for medical services for all groups. It would lead us to consider limits on overall hospital budgets, changes in tax rules and other steps to increase price sensitivity by all consumers and providers, revision of reimbursement rules for services to all patients, and other measures to alter general incentives.

The second point of view, the one shadowed by unresolved budget deficits, forces us to worry about how to cut Federal spending and/or to raise Federal taxes. It tends to downgrade the urgency of reforms in the overall financing and reimbursement systems as second-order questions that must be put aside until the on-budget issues have been addressed.

While Congress no doubt has the ingenuity to close the medicare deficit without materially altering other financing arrangements, it would be a public policy tragedy if it did so. The problem of restoring the reality of a budget constraint in the health care plans of all patients and providers is perhaps the most important issue of domestic social policy in the remainder of this century.

II

The burden of the foregoing comments is that readers of Long-Smeeding paper should keep in mind the environment within which the issues it addresses will be resolved. To begin with the introduction, the fact that the medicare trust funds face trouble has little to do with the fundamental problem that medicare and our health care system face. The trust fund problem, like the promised execution on which Samuel Johnson commented, may concentrate the mind marvelously, but I fear it may divert us from the reasons why we got into the mess we are in.

Furthermore, the analytical approach of breaking the problem up into little pieces pushes us in exactly the same direction. Thus, Long and Smeeding were requested to explore the consequences of alternative revenue sources for closing a large part of the medicare trust fund deficit. After an opening paragraph in which they press their noses against the window and look somewhat wistfully at the broader policy issues, they proceed to an expert and meticulous dissection of their piece of the problem.

The second section of the paper lists eight major financing alternatives, four kinds of taxes on the general population, and four taxes on beneficiaries. Long and Smeeding have rounded up the usual suspects: Payroll taxes, general revenues, a value-added tax, or excises on alcohol, tobacco, and gasoline. The list of revenue raisers from beneficiaries contains some familiar items: Premiums, a tax on premiums for supplementary insurance, and two slightly

more outré items: A personal income tax surcharge on the elderly and disabled and a special estate tax, again only on the elderly and disabled.

The second section briefly provides motivation for considering each of these revenue sources. Payroll taxes are familiar, and no current or immediately prospective beneficiary has paid more than a fraction of the actuarial value of entitlements to medicare benefits. General revenues already pay for most of SMI, and they have been used for social security cash benefits. The value-added tax has long held some attractions to political swains, but it has not been the kind they want to marry. (They may be getting desperate, however.) And excise taxes on tobacco, alcohol, and gasoline taxes have the obvious attraction that they penalize actions that increase medical outlays. Moreover, the real levels of these taxes are lower than in the past.

Premiums on beneficiaries are that *rara avis* of economics, the lump-sum tax that does not distort economic decisions, a tax that cannot be avoided because coverage is mandatory and causes no distortions because no action other than suicide or criminal evasion can avoid it. This premium in no sense is a means test, because eligibility does not hinge on it. It is simply a disguised reduction in social security cash benefits.

So is the personal income tax surcharge. But the surcharge is a more progressive change. How much more progressive would depend on its structure.

The tax on supplementary insurance would help fight deficits two ways: It would raise revenues directly and reduce costs by discouraging the purchase of cost-desensitizing medigap plans. In an interesting section Long and Smeeding suggest that the burden of such a tax may differ less than one might suppose from that of increased cost sharing. The latter would drive more people into buying more insurance. In both cases, they suggest, the distribution of the extra costs would be similar to that of premiums.

Finally, they look at a special estate tax levied on elderly and disabled persons who are unmarried at time of death.

The third part of the paper lists a number of evaluative criteria: Distributive equity, efficiency and behavioral effects, revenue potential and stability, and administration and compliance costs. Equity is viewed in three ways: Across generations, across income classes, and among equals.

The fourth part of the paper describes how each of the alternative taxes stand up to these criteria. Most of the results concern distribution among income quintiles of a tax increase of \$5 billion in 1975, which is roughly equivalent to \$10 billion in 1985. The authors assume all of the added revenue is collected successively from each tax.

The results are contained in three tables. Data on the institutional population are missing as they are from most surveys. The paper contains no explicit discussion of the rules-of-thumb used for allocating tax burdens. I presume that payroll taxes are allocated in proportion to earnings, general revenues and income tax surcharge in proportion to income taxes, value-added taxes in proportion to consumption, excise taxes in proportion to consumption of taxed

items, and premiums on a per capita basis. I don't know how the supplementary insurance tax is allocated.

The tables contain no surprises. General revenues and the income tax surcharge are progressive. The burden of payroll tax as a percent of income is hump shaped. The value-added tax and selected excises rise with income, but less than proportionately and are regressive. Premiums and the supplementary insurance tax are almost flat per capita and are highly regressive.

These results follow a long tradition in tax analysis and partake of the same virtues and flaws. The results assume behavior is unchanged and they ignore life cycle effects, to mention just two shortcomings that I think are serious, but will not go into here. The virtue is that if these and other problems are not too serious the results give a crude and easily understood sense of distribution among income classes.

The tables give little guide to intergenerational distribution, which requires explicit attention to how peoples' incomes and consumption change over their life cycles. They give no guide at all to horizontal equity which requires that one go behind broad aggregates such as income quintiles.

Table 4 presents detailed results for the separate excises on alcohol, cigarettes, and gasoline. All rise with income but less than proportionately. The least regressive is the tax on alcohol; the most regressive is the tax on cigarettes. Table 5 presents estimates of the distribution of the estate tax necessary to raise \$5 billion. It is progressive.

Table 6 summarizes the strengths and weaknesses of all eight revenue sources by the four major evaluative criteria.

III

It is at this point that the bite-sized chunk approach to analyzing the medicare problem begins to be most troublesome. Three examples will illustrate the problem.

First, take the value-added tax. Tables 1, 2, and 3 indicate it is regressive. But that conclusion is misleading on several grounds. European experience indicates that the regressivity can be largely eliminated by differential rates on luxuries and necessities. Furthermore, the VAT can be part of a progressive tax reform package as it was in Margaret Thatcher's first tax bill. For example, the U.S. could use part of the revenues from a VAT to free low-tax bracket families from the personal income tax and to increase the earned income tax credit. But one is diverted from thinking about these possibilities if one approaches the value-added tax as a possible fix for the medicare system. The point, surely, is that the introduction of a VAT should be considered within the broad context of revenue needs and tax structure. The same can be said for estate and gift taxes.

Second, consider the selective excises. Should the supposition that they are regressive have any material bearing on whether we impose them? Should they be linked to medicare? The answer to both questions, I think, is no. Increased taxes on alcohol and tobacco are justified as mechanisms for internalizing some of the costs from which our methods of pricing third party coverage inevitably

protect people. They may be regressive, but if that consideration is controlling, perhaps we should also provide special income tax concessions to smokers and drinkers because their habits reduce their ability to pay. The point, surely, is that we should take such public steps as we think appropriate to influence the distribution of income. We should then consider on their own merits taxes that are intended to make people recognize or pay for the burdens their actions impose on others. Once again, one is diverted from putting these issues in full context if one confronts them in the constricting framework of the medicare financing problem.

Finally, there is the supplementary health insurance tax. I believe that the Internal Revenue Code is a great untapped resource for the conscious regulation of health care. The President suggested a cap on the allowable exclusion from the personal income tax of health insurance premiums purchased by employers. But most changes in health insurance, from the reduction of first dollar coverage to the use of fee schedules or other changes in reimbursement could be encouraged, if not compelled, by use of the Internal Revenue Code. We should think carefully about whether and how to use the Internal Revenue Code as an instrument of health policy and until we have done so, we should not use it for the small contribution it could make to closing the medicare deficit.

IV

The inexorable drive of technology, rising incomes, and an aging population is causing health expenditures to rise. We rejoice at similar trends in computer expenditures as a sign of progress. But we grow restive at rising health costs because these outlays do not meet a market test and because we suspect that increasing amounts are being spent at the margin for meager benefits. The medicare system presents us this problem in full color because legislated tax rates are flat and because the numbers of the medically costly over-75 population are rising very fast.

To be sure, we can fix medicare—by curtailing covered services, by cost sharing that shifts outlays off-budget, or by relying on one or more of the taxes that Long and Smeeding examine. If that is all we do, we will have done little. We will have shifted the accounts where outlays appear and marginally changed income distribution.

But we should and are already doing more. DRG's are being put in place. Several States are implementing hospital budget limits, some of which (New York and Massachusetts, for example) are severe. If these limits spread, and I think they are likely to do so, a whole range of changes will be set in motion, forcing administrators and providers to decide which care should not be offered and compelling patients to adjust to queues and nonprovision. If such limits become the norm and our tax laws are modified to discourage overinsurance, we should recognize that the price of medicare is the price of health coverage for the aged commensurate with that available to the nonaged. If we wish to retain the self-financing character of part A of medicare, the case for increased payroll taxes will be strong. If we want to continue the joint financing of part B, we should increase premiums and general revenues to

cover its costs. I see no case for the use of major new earmarked taxes until and unless they are considered as elements of an overall tax structure adequate to pay for the expenditures which our political process deems as necessary.

PART II—CONFERENCE PROCEEDINGS

TUESDAY, NOVEMBER 29, 1989

INTRODUCTION

PAUL RETTIG, STAFF DIRECTOR, SUBCOMMITTEE ON HEALTH, COMMITTEE ON WAYS AND MEANS

Mr. RETTIG. Good morning. Welcome to the Conference on the Future of Medicare. We appreciate your coming today and we hope you will have an enjoyable conference. To begin with, two members of the Ways and Means Committee will make introductory remarks. It is my privilege to introduce Hon. James Shannon, a member of the Subcommittee on Health of the Committee on Ways and Means. Mr. Shannon.

REMARKS OF HON. JAMES M. SHANNON

Mr. SHANNON. Thank you, Paul. On behalf of Chairman Rostenkowski and Chairman Jacobs, I would like to welcome all of you here this morning to the start of the Ways and Means Committee's Conference on the Future of Medicare.

This extensive, 2-day conference will establish a frame work for addressing what will be, without question, the toughest domestic issue the Congress will face over the next few years.

Medicare, the single most important Federal program protecting older Americans from financial hardship due to major illness, is now confronted with extremely serious funding problems.

The question this conference will explore is how we can assure that medicare remains adequately funded without cutbacks in the essential health insurance it provides.

There is little dispute over the fact that the medicare hospital insurance trust fund will be bankrupt by the end of the decade, if not sooner. By 1995, that fund could run up a deficit of well over \$250 billion—a third to a half again the total amount of revenues the fund is projected to receive over that time period.

The supplementary medical insurance trust fund—medicare part B—will avert bankruptcy only because of automatic transfers from general revenues. But the size of those transfers continues to escalate, making benefits under medicare part B a prime target in many of the Federal deficit-reduction proposals.

As will become clear during this conference, the sheer magnitude of the medicare financing crisis is far larger than the cost-saving potential of any of the policy options under active discussion today.

Not only is the medicare financing crisis of drastic proportions, it is also extremely complex.

Unlike social security, which provides direct cash payments to beneficiaries, medicare reimburses providers of health care for

services rendered to people covered by medicare. The solution to the medicare financing problem will lie in part in getting the health care providers to do their job in a more efficient and less costly manner. It is not simply a matter of cutting back on reimbursement or raising additional revenues—the system must be reformed into one which discourages waste and encourages efficiency.

We have ahead of us a long process of education and consensus building—both across the country and here in Congress—before there can be major action on medicare reform, and this conference will provide an excellent foundation from which to build. As we proceed, I believe it is vitally important that we never lose sight of the following three points:

First: The medicare system cannot be reviewed or reformed in a vacuum. The financing crisis this conference will examine today and tomorrow is mostly a symptom of the decade-old crisis of health care inflation. And while overall inflation has dropped, the cost of health care in the United States is projected to increase at a rate of 11 to 12 percent for the rest of the decade. Medicare's problems will never be fully resolved as long as health care costs continue to escalate at double-digit rates. Furthermore, any proposal to cure medicare must be assessed as to its impact on the overall health care system. Fixing medicare simply by shifting costs onto beneficiaries or private insurers is no solution at all.

Second: We cannot forget, as we focus on this financing crisis, that adequate health care remains beyond the reach of millions of Americans.

Medicare covers only 45 percent of the total health bill for the elderly;

Copayments, premiums, and out-of-pocket expenses continue to escalate so that older Americans now spend 14 cents of every dollar on health care;

There is still no protection against catastrophic long-term illness; Physicians can still charge medicare beneficiaries amounts above and beyond the medicare reimbursement amounts;

We have yet to enact a health insurance program for the unemployed;

The list goes on.

We cannot allow the medicare financing crisis to divert attention away from the major work that remains to be done in assuring adequate health care for all Americans.

Third: Any solution to this crisis which is designed to avoid drastic cutbacks in protection or mammoth tax increases will need time to become effective. The longer we wait to act on this issue, the more difficult it will be to prevent the drastic types of changes we all want to avoid.

As will become clear during this conference, the severity of the medicare funding problem cannot be overstated. If we were to address the medicare deficit solely through reducing benefits, we would have to cut the program by 30 percent. If we were to address the problem solely through tax increases, we would have to raise them 50 percent. I strongly doubt there is anyone in this room who would find either of these approaches acceptable.

The alternative, then, is to make the overall health care system more efficient and less wasteful.

Last spring, this committee and the Congress took important first steps by adopting a prospective reimbursement system for the hospitals. That legislation also directed the Secretary to report back to Congress on ways to extend prospective reimbursement to the other payors of health care, and to physicians as well.

Meanwhile, many States, working with broad-based coalitions made up of the business community, the providers, and the beneficiaries, have adopted statewide health cost containment programs.

While the basic message of this conference might be a grim one, it is encouraging to note that the first steps have already been taken. This conference will establish a consensus on the scope of the problem and lay the groundwork for the coming debate on what remains to be done.

The crisis will soon be upon us. It is essential that we begin to face it today.

In closing, I would like to express my deep appreciation for the tremendous job done by the Ways and Means Committee staff, in conjunction with the Congressional Budget Office and the Congressional Research Service, in developing this excellent 2-day conference.

Mr. RETTIG. Thank you, Mr. Shannon.

It is my privilege now to introduce Hon. W. Henson Moore, ranking minority member of the Subcommittee on Health of the Committee on Ways and Means.

REMARKS OF HON. W. HENSON MOORE

Mr. MOORE. Thank you, Paul. I join my colleague on the Subcommittee on Health, Jim Shannon, in welcoming you to the Conference on the Future of Medicare.

When the idea of this Conference on Medicare was conceived just over a year ago, I don't think any of us had any notion we would have this kind of response. We are all very gratified.

I would like to add a special welcome to those who are listening this morning to the proceedings of this conference in the Energy and Commerce hearing room in the Rayburn Building, due to the lack of space in this room, where an audio hookup has been installed to accommodate all those people who had indicated an interest in attending this conference.

I am certainly encouraged when I look out over the audience to see the number of people who are willing to take the time to begin to work with us in addressing what I consider as the single most important domestic issue facing the Congress of the United States in this decade.

This is a very unusual procedure, and I, in the years I have been in Congress, have never seen anything quite like this.

I hope that what we will get from this conference is not the hearing format that we normally get, but a free exchange of ideas and the beginning of a stimulation throughout this great country of ours to bring forth every possible concept and idea to be discussed and thought through.

I think that is going to be the great value of this conference. As Jim said, we all know the problem of medicare—\$250 billion in

deficits by 1995. That is significantly more than the entire deficit of the Federal Government last year or this fiscal year in this one program, and we think those deficits are horrendous.

Medicare is one of the—if not the most—important social program of the Federal Government, part and parcel to social security. In addition to not only having to solve the problem of social security, we have to address the impending bankruptcy of medicare. The solutions we select are critical since they will set the direction in our health care delivery system in general just as the DRG prospective payment system, included in the Social Security Amendments of 1983, is setting the direction for hospital payment.

We expect to see that approach used heavily outside medicare across the spectrum of our health care delivery system. Likewise, we think that many of the solutions that come forward from this conference, and which may ultimately become law, will influence the direction of our Nation's health care delivery system.

When looking to the near future, however, I think I can safely say that nothing much is going to happen in 1984. There are two reasons for that. First of all, it is going to take time to develop a consensus of what to do. We would like to move very quickly, but realistically, 1985 is the earliest this Congress will be able to act.

We need to move in 1985, even though the program won't be out of trust funds by then, because we are rapidly approaching a negative cash flow situation in the fund.

It takes time to generate the ideas, it takes time to get them on paper as law, and it takes time for them to be phased in. And so, if you don't want to have a very traumatic change from existing law to what the law will be in medicare, phase-in time will be required, and every year you delay tackling the problem, you shorten or eliminate that phase-in period and increase the trauma of the change you must make.

But as a practical matter we will need the time between now and 1985 to germinate every possible idea, to think that idea through, and to get it translated into legislative language.

So we have a year in which to work on ideas, and hopefully a year from today to be in a position to be ready to move in 1985.

A second reason why nothing is going to be done in 1984 is obvious—it is an election year. The Congress seems to shy away from very controversial issues it doesn't have to face when it is facing election itself and election of its candidate for President of the United States.

Medicare is going to make the social security problem we tackled earlier this year look like child's play in terms of political difficulty. It is going to be a most sensitive issue, I think the most sensitive socioeconomic issue of the decade to face the Congress.

Unfortunately, there are already some who are using this issue for political gain for next year. I have already seen two political fundraising letters seeking to raise money on the grounds that one party is about to destroy the medicare system and the recipient of the letter better send in money to save it.

If those funds were going into the medicare trust fund, I would be a bit more encouraged, but since they are not, I find the letter most unhelpful in trying to build the consensus we have got to build for the future.

In any event, that is politics, and that is why nothing will be done next year. But in 1985, I think the action will begin in earnest and we must be ready.

So, let us today begin to seek and consider all possible ideas and solutions and let us begin today to build a bipartisan, industry-involved and publicly understood consensus to solve this problem, and to set new directions for solving the larger problem of the Nation's rising cost of health care.

Thank you.

Mr. RERTIG. Thank you very much, Mr. Moore.

I believe both these members of the Health Subcommittee plan to participate further in this conference, although I understand that Mr. Moore, at least, has to leave now for the time being.

The next item on our program is a presentation by Marilyn Moon of the Congressional Budget Office of a paper, for which she is joint author with Paul Ginsburg, also of CBO, that will represent an introduction to the medicare financing problem and set the stage for our later discussions.

AN INTRODUCTION TO THE MEDICARE FINANCING PROBLEM

MARILYN MOON, ANALYST, INCOME SECURITY AND HEALTH UNIT,
HUMAN RESOURCES AND COMMUNITY DEVELOPMENT DIVISION, CON-
GRESSIONAL BUDGET OFFICE

Ms. MOON. Thank you, Paul.

We are gratified and a little terrified to see so many of you here this morning.

I am going to speak only briefly about the magnitude of the problem and provide an introduction to some of the options facing medicare so that we can turn quickly to the papers and discussions that we have planned.

The medicare program faces serious financing problems for the foreseeable future. Under current policies, the Hospital Insurance Trust Fund will be depleted by the end of the decade and contributions from general revenues required to support SMI benefits will continue to grow at a rate that far exceeds the growth in general revenues. The basic problem is that spending on medical care is growing more rapidly than national income.

Projections over periods as long as 10 or 15 years are very imprecise, but differences between growth in medicare and growth in revenues is so large that errors in forecasting are relevant only to dates and amounts—not to the conclusion that under current policies, severe financing problems will occur.

Over the near future, the projected growth in outlays is attributable primarily to rising medical care costs, and only to a lesser extent, to the aging of the population. A large part of the increase in costs is attributable to expansion in the volume of services provided—where volume refers to both intensity of care and number of courses of treatment provided to patients. With medicare committed to financing mainstream medical care for its beneficiaries, changes in medical care practice automatically reflect themselves in medicare outlays.

Depletion of the HI trust fund is projected by 1990 unless further policy changes are implemented. The yearend balances are projected to decline each year as annual outlays exceed annual income. Deficits would be small at first, but then increase rapidly. By 1995, the annual deficit would be over \$60 billion, or more than one-third of the projected outlays for that year. The cumulative total deficit would be over \$250 billion.

Projections for the subperiod beginning in 1985—at a point when most of the recent legislative changes will have been implemented—illustrate the nature of the problem. Over the 1985-95 period, outlays are projected to grow at a 12.4-percent annual rate, with revenues growing at 7.9 percent.

Demographic trends—including growth in the number of enrollees and the effects of the aging of the population—are projected to account for 2.2 percentage points of the growth in HI outlays. The effect of changes in the nature of medical care is the most difficult to project, partly because such changes are influenced by the nature of the reimbursement system. Real outlays per enrollee are projected to grow at slightly more than 4 percent per year after 1985, reflecting both the impact of a higher admissions rate per medicare enrollee and more resources applied per hospital stay.

The projection of the revenue growth rate for covered earnings reflects a forecast of the near-term performance of the economy and assumptions of moderate growth thereafter.

Problems raised by the rapid growth expected in SMI are closely related to concern over the size of the Federal budget. Since, by law, appropriations from general revenues to SMI must be sufficient to guarantee solvency of the trust fund, SMI does not face a financing crisis *per se*. Rather, concern arises over this part of medicare because the projected growth of SMI is so much higher than the growth of general revenues, from which it draws support.

Like HI, outlays under SMI are projected to increase rapidly—by almost 16 percent per year through 1988. The share of general revenues necessary to finance the SMI trust fund will rise from 3.1 to 5.7 percent between 1982 and 1988. If the share of general revenues contributed to the SMI trust fund were not allowed to rise, outlays would have to be reduced or premiums increased by almost \$27 billion over the 1984-88 period, an amount representing about 19 percent of all SMI expenditures for the period.

If the growth of both revenues and SMI outlays were to continue at the same annual rates now projected through 1988, SMI would require a transfer of more than 11 percent of general revenues in 1995.

Projections of the expected growth in SMI expenditures are based on past experience which indicates that growth is a product of an increase in the number of persons covered by medicare, higher prices for services rendered, and rising use of services per beneficiary. For example, between 1978 and 1982, total SMI benefits grew at an average rate of 21 percent. About one-tenth of this was attributable to expansion in the enrolled population. Although it is difficult to separate the price and volume factors, changes in the latter are particularly important in SMI, accounting for almost half of total per capita growth in outlays.

In this introduction, I shall not describe options in detail or evaluate them, but rather provide an overview of the range of general approaches.

Options for attacking medicare's financial problems can generally be classified into three broad categories:

Pay for fewer services;

Pay less for each service; and

Shift responsibility to beneficiaries or taxpayers.

Unless options for change address the underlying problems of medicare of rising volume of services and increasing unit costs per service, however, medicare is likely to continue to face financial pressure.

Let me turn first to paying for fewer services. One of the criticisms often leveled at medicare has been the low level of control over what medical care services are delivered. Payment schemes that reimburse on a fee-for-service basis provide few incentives to providers or beneficiaries either to limit the number of medical services or to use a lower cost mix of services.

Reducing the volume would require careful consideration of the efficacy and value of individual medical procedures. While some services might be readily discarded under closer scrutiny, significant reductions in volume would require foregoing services that are efficacious, but whose medical benefits are judged to be small in comparison with their cost.

Reductions in volume could be accomplished through incentives for providers or patients, or by direct controls by medicare or its designated agents.

The essence of an approach emphasizing incentives for providers would involve changing the unit of service that is reimbursed—for example, broadening further the unit of payment to encompass all medical services required by a patient over a year. The health maintenance organization is the best known provider organization that contracts to provide medical care on such a per person basis, and it has demonstrated substantial reductions in volume compared with fee-for-service medicine. In addition, a medicare voucher system has the potential of affecting volume by giving beneficiaries access to other organizations willing to provide care under capitation payment.

In contrast to incentives for providers, cost sharing could reduce the volume of services by emphasizing incentives to the patient, although the existence of extensive private supplemental coverage reduces the effect of such cost sharing for the medicare population.

Direct controls on providers by medicare or its agents offers another alternative to reduce the volume of services. Examples are utilization reviews which attempt to reduce volume by identifying uses of services that depart from the norms of medical practice, limiting payment for difficult procedures to designated centers, and ending medicare coverage of very expensive procedures with questionable or small medical value.

Although reducing reimbursements for each unit of service provided can produce considerable shortrun Federal savings, such approaches do not directly address the underlying problems leading to higher medicare costs. Indeed, lower reimbursements might aggravate problems with volume of services, thereby offsetting some

Federal savings. Restricted access to mainstream services for medicare beneficiaries is another concern if the level of reimbursements is severely restricted.

Coordinating reductions in reimbursements with other payers could alleviate some of these problems, however. Providers would be more prone to increase efficiency and reduce the growth in input prices—especially wages—when opportunities for cost shifting are removed. Indeed, providers' greater strides at cost reduction might open possibilities for additional reimbursement reduction in the future.

Finally, unless medical care costs can be readily brought into line by changes in reimbursement practices, it is likely that additional costs must be borne by beneficiaries, taxpayers, or both. Medicare beneficiaries could pay a greater share through across-the-board increases in premiums, premium increases restricted to higher income beneficiaries, or greater sharing of costs by the users of such care. The tradeoffs among the major options for shifting costs to beneficiaries are relatively straightforward—across-the-board increases would spread the burden among the greatest number of individuals, while tying cost sharing to use of services would have a somewhat greater impact on beneficiaries' incentives for use of care.

Medicare vouchers might be viewed as an alternative to major increases in cost sharing. Vouchers could, like cost sharing, shift the burden onto beneficiaries, but also expand the range of choices available to them.

The HI deficit could also be reduced through increased revenues. Increased revenues could be obtained by raising the payroll tax rate, levying a new tax and dedicating the revenues to the trust fund, or transferring general revenues to the trust fund. A number of considerations relevant to this choice include the question of who should pay the additional taxes and whether the trust fund approach should be maintained.

Finally, the overall budget outlook is certainly important. With large deficits projected for the foreseeable future, approaches depending heavily on transfers of general revenues would have to carefully consider what taxes should be increased to provide revenues for medicare.

The medicare financing problem is a manifestation of a broader societal problem—the vastly different growth rates between health care spending and incomes available to pay for it. Changing technology continually yields opportunities for additional medical services that have prospects of improving medical outcomes. Many are very costly, however, and current financing arrangements give only limited encouragement for weighing benefits of services against their costs.

Changes in financing that would bring incentives to bear on decisions concerning the use of services are likely to be an important part of solving the medicare financing problem in particular and society's problem in general.

Solutions to medicare's problems are not, however, likely to result from one change, but rather from a combination of approaches, making it particularly important to keep in mind issues

of coordination and interaction among the options we consider at this conference today and tomorrow.

Mr. RATTIC. Thank you, Marilyn.

Let me say a word now about the way the remainder of the conference is organized. The conference is structured with several topics that appear in your program. The general pattern will be that a paper on each topic will be summarized and briefly commented on, not by the author but by the lead commentator, and the author will then be given some time for a reply. And afterward there will be a discussion by a group of selected participants who are familiar with the paper.

Now I want to introduce the authors and the lead commentator for the first paper to be discussed in the next section of the conference, which has to do with restructuring medicare benefits. The authors are William Hsiao of Harvard University and his colleague Nancy Kelley of Policy Analysis, Inc. Eli Ginzberg of Columbia University is the lead commentator. The moderator for the next panel discussion will be Paul Ginsburg of the Congressional Budget Office.

BENEFITS

PANEL:

PAUL GINSBURG, Deputy Assistant Director for Income Security and Health, Human Resources and Community Development Division, Congressional Budget Office

ELI GINZBERG, Ph. D., Director, Conservation of Human Resources, Columbia University

WILLIAM HSIAO, Ph. D., Former Chief Actuary for Health Programs, Social Security Administration; Currently Associate Professor in Economics, Department of Health Policy and Management, School of Public Health, Harvard University

NANCY KELLY, D. Sc., Vice President, Policy Analysis, Inc., Brookline, Mass.

HAROLD S. LUFT, Ph. D., Professor of Health Economics, Institute for Health Policy Studies, School of Medicine, University of San Francisco

BERNARD FRIEDMAN, Ph. D., Associate Director, Center for Health Services and Policy Research, Northwestern University

STEPHEN LATOUR, Ph. D., Associate Professor of Marketing and of Hospital and Health Services Management, Department of Marketing, J. L. Kellogg Graduate School of Management, Northwestern University

EDWARD F. X. HUGHES, M.D., M.P.H., Director of Center for Health Services and Policy Research, Northwestern University

PAUL ALLEN, Director, Medical Services Administration, Michigan Department of Social Services

KAREN IGMANI, Assistant Director, Department of Occupational Safety, Health and Social Security, AFL-CIO

STANLEY B. JONES, Principal, Health Policy Alternatives, Inc., Washington, D.C.

JOSEPH NEWHOUSE, Ph. D., Head, Economics Department, The Rand Corp., Santa Monica, Calif.

ROBERT MYERS, Former Chief Actuary, Social Security Administration; Currently Professor Emeritus, Temple University, Philadelphia, Pa.

JENNIFER O'SULLIVAN, Specialist in Social Legislation, Congressional Research Service, Library of Congress, Washington, D.C.

ROBERT A. PATRICELLI, President, Affiliated Businesses Group, CIGNA Corp.

JOHN SINN, President, Board of Trustees, Eisenhower Medical Center

Mr. GINZBERG. I have had many assignments in my long life, but never to summarize somebody else's paper with the "somebody else" directly next to me.

This is a paper which I read more than once because I realized the circumstances under which my summary was going to take place and I am trying very hard in the first part of my comments, which is the summary, to follow the text as carefully as I can.

Let me begin by saying that the paper has a double focus. It really seeks to make a contribution to the reduction of the deficit in medicare, and second, it wants to do that through a cost-sharing approach which will improve the present beneficiary system. So it has at least these two major objectives.

It starts with a perception of the fact that the alternative to cost sharing, which Professor Hsiao considers to be a regulation broadly defined, is not really a desirable way to go and thereby puts additional weight on the cost-sharing approach.

The next point, and I think it is an important one not generally recognized, notes that if one is looking for improvements in the efficiency of the system via cost sharing, such improvements can

come either from patient behavior and/or provider behavior. Professor Hsiao recognizes this distinction but doesn't elaborate on it further.

The major idea that underlies the paper is that by incurring cost sharing on beneficiaries, they will shop the market and try to find less expensive providers. That is the essential point of the whole paper—that is, if you introduce a major economic incentive to the purchaser, he or she will shop the market and try to get more for less.

Now, Professor Hsiao is aware of the fact that there are limitations to cost sharing. That is, people without much money may delay treatment; they may not have adequate information about the marketplace and thereby not know how to shop; that on the whole, the poor will be worse off than the middle- and upper-income groups because the latter can afford cost sharing more readily; and importantly, there is no guarantee about these deferrable changes leading to greater efficiency if consumers continue to buy supplementary insurance via medigap.

Professor Hsiao then reviews the empirical studies which are available concerning the effects cost sharing as we know about it from the literature, and on the whole he argues—and I think correctly—that all of the results to date indicate that if you have a reasonable amount of cost sharing on the beneficiary, there will be a reduction in demand for services.

He points out, however, that that reduction in demand for services will probably be considerably greater in the case of ambulatory care services than in the case of hospitalization. Still the Newhouse study, according to him, suggests that there will be a reduction in hospitalization. Unlike Roemer's original view, that cost sharing could lead to "serious delayed results leading to additional hospitalization," Newhouse doesn't seem to have found that, at least as yet.

Now, the question arises as to what are the disabilities of patient's cost sharing, because medicare is a cost-sharing system. Well, the first thing—I say the first thing—that doesn't mean that the paper goes exactly this way, but my notes at least say one of the troubles with the present cost sharing is that so many consumers have gone and bought medigap—two-thirds of them—and they pay \$400 a year for medigap and that undermines the behavior consequences that you want to obtain via cost sharing. With alternative insurance giving them protection, they have no need to shop the market.

Second, the informational sources to help consumers act more rationally with respect to providers are not available in many instances. They don't know what physicians and hospitals charge, and so on. There must be something wrong, however, Professor Hsiao says, about the market because he presents a table about the tremendous variability in prices in the same market both with respect to hospitalization and with respect to physician charges.

He sums up this part of the analysis by saying that the benefit structure under present medicare is poor, for reasons I will amplify in a second, having to do with the fact there is no catastrophic coverage.

In addition, that it really is an open ended approach to letting hospitals and physicians keep on raising their charges and that physicians make all of the decisions.

Now, in Professor Hsiao's point of view, a good benefit system would have to protect the individual from financial ruin. That means some form of catastrophic coverage. It would encourage efficiency in the production of services and there would be an element of equity in how the cost sharing was distributed in relationship to family income.

Now I am coming to the guts of Professor Hsiao's plan, which is, What is this plan he and his colleague, Ms. Kelly put together?

No. 1, they want to divide on a more or less health service area all providers, which means: First, hospitals and second, physicians—we won't go into the other details—into three classes; namely, high charges, middle charges, and low charges. He wants to establish classes. He then wants to have the coinsurance factor geared to the class of the provider so that if the beneficiary picks the lowest class provider, they have no coinsurance to pay. If they pick the middle one in terms of hospitals, it is 10 percent, and if they pick the high one, it will be 20 percent.

In terms of physician charges, the ratios are 10, 15, and 40 percent, depending on what kind of providers the beneficiary picks.

Professor Hsiao also wants to raise the deductible for SMI from \$75 to \$100. Having established the staggered coinsurance rates, Professor Hsiao wants to add catastrophic coverage; he wants to put some limits on how much people at different income levels will have to pay. Roughly he says that for people with family income under \$10,000, the worst is that their coinsurance will amount to \$1,000; for those families between \$10,000 and \$20,000, up to \$2,000; and above \$24,000 their maximum liability will be \$4,000. That is the way it breaks.

Professor Hsiao believes that because of the DRG system there will be plenty of data available. Maybe a little bit more will have to be collected in order to operate the three classes of providers—high, low, and medium.

The final points that he makes relates to what this all adds up to. He was very careful not to say that this was the only solution by any means to the medicare problem. All he claims is if you go his way it will be a better system.

Now, as far as contribution to the financial balancing of the system, he offers something like a net \$3 billion additional income to the Federal Government in 1987, not counting—because he didn't want to be too speculative—such additional improvements as might come through what he would call behavior changes to make the system more efficient. So just net transfers between the Federal Government and other payors would add about \$3 billion in 1987 to medicare.

In his system you would then have catastrophic insurance in place and he argues that the average beneficiary of the system would be paying no more than \$120 additional in 1987 and that the equity principal would be protected because by and large, those in the lower income groups could spend only up to \$1,000 in additional outlays and medicaid would continue to pay for most of the coinsurance.

That roughly is my understanding of what Professor Hsiao and Ms. Kelly have said. I hope I have summarized this proposal fairly. I now come to my critical comments.

First, I think it would be a mistake—and this is about everybody that follows today—to be too ambitious in this conference and to try to do too many things all at once.

I don't think any proposal will very easily solve the Federal budgetary implications of the great gap, make the whole system more efficient, and result in big, new, better benefits for everybody.

That is all very nice, but I would say that is as far as I am concerned, vastly overambitious. We have been trying to get a little control over costs since around 1968 when we removed the 2-percent override on hospitals. And we surely haven't been doing very well on cost controls right down to date.

Take it easy. Don't expect too much.

Second, I really think that while it is not Professor Hsiao's problem since he was on the beneficiary side of the equation, the fact is that he did think about the gap, and there isn't really much money the way he juggled the system in terms of only \$3 billion of contribution by the end of 1987.

Moreover, he did point out that he is a little worried about the cost implications if you provide catastrophic coverage, and he slips back and says maybe the only way to control that additional benefit is through regulation and through peer review, which is far from relying on the market. Once patients pass into the catastrophic arena, providers have no reason to be worried about spending more money for them.

I think a fundamental question relates to classification systems of high, medium, and low. There is not an iota of evidence in our experience to date that such a system would work.

I have absolutely no sense of confidence in exploring that kind of a new administrative structure, nor do I believe that the margins between low, medium, and high can be estimated. Everybody concerned would be in the courts trying to get himself or herself into a lower class. I just don't see how that is going to work.

Third, I am very dubious about the availability of information and putting the burden on beneficiaries to shop the market. There is nothing that I know about the literature that leads me to believe that people shop the market for hospitalization. Anything but. They may do a little shopping, but not very much. The recent Equitable Life Insurance survey revealed that they don't even shop the market very much for physicians. I don't have any confidence whatever that this elaborate system has much chance to work.

Fourth, I am very restive about the presentation that there will be only about \$120 on the average additional costs per beneficiary. In my opinion, that is not the point. In my opinion the point is what will it cost somebody in the medicare group who has to be hospitalized, and, if one is hospitalized 1 year, the odds are that next year they are much more likely to be hospitalized again.

I didn't do any careful calculations but it looks to me that the question that ought to be asked and answered is, What will be the costs to the persons who are unfortunate enough to have to use hospitals not only in 1 year, but in 2 years—and I get very much

higher figures, four times, five times, six times the average cost to the beneficiary calculated by Professor Hsiao.

Now, it is quite true that there is a ceiling on beneficiaries, total outlays but I don't think that is a modest ceiling. That is, take \$4,000 as added costs; that would amount to \$8,000 back to back for people who have \$24,000 of family income. That doesn't look to me to be exactly the principles under which the American public, through the Congress, have made a contract with the elderly.

Moreover, I see nothing in Professor Hsiao's paper which would lead me to believe that the medigap approach will not continue to be followed by most people which undermines the whole behavioral gains.

Moreover, he does not mention whether payments to physicians will have a ceiling. I mean we do a pretty bad job now, I think, in paying the physicians to take care of medicare patients under SMI, but I see nothing in his analysis which suggests that as long as the patient is willing to pay the 40-percent coinsurance at the highest level, just what the Government's position will be about paying its part of those bills.

I would say that this presentation of Professor Hsiao, as far as I am concerned, is a major change in policy which the Congress is always free to make, but I do not advise that it should make.

Given the kinds of commitments that the United States has made to the elderly in terms of the basic approach to medicare, we cannot scrap it, and offer them instead some kind of catastrophic coverage to help pay their excessive costs. I was impressed recently with the Equitable survey that about two-thirds of persons in medicare are complaining bitterly about their hospitalization costs. Unless we can do something in a much more fundamental way about changing this situs of care away from the hospital, paying beneficiaries less doesn't seem to be a very good way to go.

Well, I have a few minutes left, and I was told that in addition to criticizing Professor Hsiao's paper I could quickly tell you where I come out.

I have already suggested to you that I don't want to do too much all at once. I think this conference has its hands full, and I would therefore not move on the catastrophic format despite the fact that it has long been a gaping hole.

More than 30 odd years ago I recommended to Governor Dewey that New York State, by legislation, force insurance companies to write coverage that would take care of catastrophes, but I lost out on that and I don't think it is sensible now, with medigap and medicaid around, to go back to that issue.

Second, I do want to, and I think it is important that we try to loosen the present system by adding choices as long as we are sure that they are substitutive and not additive. So I would like to try some experiments with prepayment for HMO's for the elderly.

That is not going to work according to a recent article in the Inquiry, unless we do something about health status as a risk factor in terms of enrollment in the HMO's. But I do think it is important to loosen up medicare and to see whether we can treat more of the elderly out of hospitals. I believe that is possible, but that means we have to address that HMO question in some kind of a prepayment system that they will be willing to go for.

The next point is that I firmly believe that we do need the medical profession's assistance in trying to slow up the introduction of questionable new technology before medicare pays for it because that contributes much to driving the costs up. I think cost can be slowed if technology is reined in.

We haven't begun to do that, but I think we have to do it if we are serious about controlling costs.

Next, the DRG system, which I don't expect will work very well. Nevertheless, we have to live with it and try to make it work better. In that effort we should try to do whatever we can to hold down capital costs because excess lids keep inflating the costs of the system.

The next point is that I am distressed by the fact that one percent of the population—this is of the whole population—apparently accounts for about 30 percent of all costs. That is in Morris' paper which he gave as testimony here in May. I don't know whether it is exactly right, but he argues that the percentage is up from 17 percent in 1963 just before medicare.

I have always believed it to be true that one of the things medicare did, partly correctly and partly incorrectly, was to make the elderly ideal patients from the point of view of the hospitals doing more and more things to them. I would like to have more study and control of the 1-percent group. Most of them I suspect are elderly but not all, clearly.

I come out finally believing that I don't think Congress can walk away from its basic commitments. Most of its efforts will have to be on raising new taxes. I want to see the HI tax go up. I would be perfectly willing to see it go up in some relation to income. I am no expert on taxes but we need more income in HI.

I am willing to see the SMI go up again, if Congress relates the rise to income. It looks to me that unless we are willing to rip medicare apart we must pay attention to the revenue side.

Congress in the seventies moved in the opposite direction, for reasons that escape me. Congress reduced HI taxes. That is made clear in the Wolkstein paper. I was amazed to read that the Congress in the seventies really reduced the tax burden on HI.

So I would say that the final issue, from my point of view, is how Congress is going to respond to the American public; what degrees of freedom it has or will take to walk away from a major and solemn commitment that the Congress made in 1965.

Mr. GINSBURG. Now we will move to the reply by the paper author, Prof. William Hsiao of Harvard University.

Mr. HSIAO. First of all, I should explain why my coauthor Nancy Worthington Kelly is not here this morning. While I am here to provide ivory tower solutions to medicare problems, she is doing something concrete in solving these problems. Mrs. Kelly has recently given birth to a new taxpayer to support medicare. That's why she can't be here today.

I think Professor Ginzberg has summarized our paper very well, and let me just highlight a few points. As pointed out this morning by Congressman Shannon, the driving force that creates a financial problem for medicare is the rapid inflation of medical care costs. The policy issue then is how do we try and constrain this cost inflation. Can we do it only through Government regulations?

Do we just let this inflation go on and for higher health costs by higher taxes of any form, or should we also try to constrain that inflation through the decentralized market mechanism, that is, consumer demand?

In our paper, we state that there are three ways to solve medicare's financial problem: Raise taxes, change benefits, or regulate providers. But none of the three approaches alone could be the panacea to control the health cost inflation and solve the financial problems of medicare. We think all three have to be tried, and it is in that context we present our paper.

Professor Ginzberg is correct, we did not address the issues of regulating the providers or totally restructure the health care system, because these issues are outside the scope of our paper. Our topic was how do you go about restructuring the benefits of the medicare program in a rational way.

Through 20 years of experience since the enactment of medicare, we learn that there are two major flaws in the current medicare benefit structure. First, the program does not protect the beneficiaries from financial ruin. Therefore it fails to serve as an insurance protection for the elderly Americans. This flaw in the benefit design induces many elderly to purchase medigap insurance.

Second, there is inadequate information about the relative costs of medical services rendered by different providers. In our paper, we provide some empirical data to show that within the same community the hospital costs can vary by 100 percent for the same DRG category. Physician charges could vary 100 percent for surgical procedures and 200 percent for medical services. Under the present benefit structure, the elderly are given no incentive to shop for the least costly providers that may adequately serve their needs. We recommend a restructuring of the benefits to introduce such an incentive.

Two proposals were outlined in our paper. One is to limit the total amount that the beneficiaries have to pay for cost sharing. The ceiling is related to the beneficiaries' ability to pay.

Our second proposal is to vary the cost sharing by the price category to which a hospital or physician belongs. In other words, beneficiaries have to pay higher coinsurance rates when they obtain services from higher priced providers. We believe that if the price information is gathered by the Government and widely disseminated to the beneficiaries, some beneficiaries, not necessarily everyone, will begin to ask these questions: Do I have to use that most expensive hospital? Or do I have to go to Dr. X if Dr. X is charging twice as much as Dr. Z?

We think competitive shopping by patients will promote the economic efficiency of the health care system, and help to moderate the health cost inflation.

Professor Ginzberg commented that administratively assigning each provider into three price categories will be very difficult. He believes that there will be lawsuits. Also Professor Ginzberg believes the dissemination of price information to the beneficiaries will be difficult. Well, I do not agree with his beliefs because evidence contradicts them. In many communities, particularly where the business-labor coalitions are active, they are already conduct-

ing these activities, disseminating price information of the different providers to the employers and to consumers.

Professor Ginzberg commented that people have not demonstrated that they shop around for the lower priced providers. I agree with that observation. But people have not shopped because the current benefits do not provide any incentive for the beneficiary to shop around, thus there is no reason why they should shop. As a matter of fact, under the present medicare's cost-sharing provisions, the beneficiaries should shop and pick the most expensive hospitals, because beneficiaries only have to pay a flat deductible for hospital services.

The current system provides these perverse incentives. That is why people are not shopping. There is no strong reason why we should keep these perverse incentives. We propose to alter them and introduce some positive incentive for people to shop, then see whether people really respond to these incentives.

Professor Ginzberg also commented that the beneficiaries may continue to buy medigap insurance and thus undermine the benefits of variable cost-sharing rates. I am quite confident that many elderly Americans will continue to buy medigap, there is no disagreement between us on that point. But where we may disagree is how many beneficiaries may stop buying medigap insurance when there is a limit on the patient's cost-sharing liability. Also if beneficiaries can reduce their cost sharing by shopping for the least cost provided, they face lower rates of cost sharing which would reduce their financial liability. Because of these considerations, I believe that a significant portion of elderly may stop buying medigap.

Lastly, Professor Ginzberg commented that the burden of our proposed cost-sharing provisions will be a large financial burden to many beneficiaries. He commented that for people with an average income of \$24,000, they could have serious illnesses back to back from 1 year to the next. These beneficiaries would have to pay \$4,000 out-of-pocket expenses each year. I agree that this is a large financial burden on these beneficiaries.

On the other hand, I hasten to point out that under the present law there is no limit as to what a beneficiary has to pay. The beneficiary under present law may have to pay out \$20,000 each year and back to back. Because of this situation, we recommend that a limit be imposed on the cost sharing that the beneficiaries have to pay. I take from Professor Ginzberg's comment that he endorses our proposal.

In conclusion, I like to emphasize that our proposal is a progressive step to reform medicare. It increases the protection to the elderly Americans against financial ruin, and also puts in place the positive incentive that could improve the economic efficiency of the medical care markets and thus contain health care costs. But our proposal alone would not be sufficient to solve the medicare problems. We suggested that the restructuring of benefits has to be coupled with regulations and other financing measures. Together they can work in concert in solving health cost inflation and medicare financing problems.

Thank you.

Mr. GINSBURG. Before I introduce the next panel, I would like to continue where we left off, with the lead commentator's presentation of the paper, and response by the authors.

The second paper is entitled, "A Medicare Voucher System: What Can It Offer?" The authors are Bernard Friedman, Stephen LaTour, and Edward Hughes, all of Northwestern University; but the first speaker will be the lead commentator, Prof. Harold Luft, from the University of California at San Francisco.

Mr. LUFT. The authors choose to focus on an attempt to reduce inefficient resource use in medical care. Higher coinsurance and contracting with provider groups are the two primary means to discourage inefficient use. They offer a prototype mandatory voucher plan combining both of these features: A fixed voucher indexed over time which allows a choice of plans. It provides incentives for efficient use of services by both providers and beneficiaries.

The authors point out that there are a number of problems with a voluntary voucher plan. It would continue to subsidize the current medigap plans. People tend to overestimate the value of medicare. Setting up a voluntary voucher plan would be difficult because of regional differences in costs. And finally, cash rebates for the low-option vouchers would be most attractive to the poor; and they would then, when sick, go onto the medicaid program, so we would merely be transferring medicare's problem to a medicaid problem.

The authors suggest there are several precedents for a voucher-type approach. Substantial experience with voucher-type plans has been developed by some employee groups. The Federal employee health benefits program has a long history of periodic enrollment, without health screening, and there are arguments that in fact this works fairly well. Similarly, there is experience with the housing allowances as a voucher-type program which suggest that one can quite efficiently and effectively provide support through a voucher system.

There are several problems that the authors point out with the voucher plan. First, it involves the loss of medicare's monopsony power. The fact that medicare currently accounts for about a third of all admissions to short-stay hospitals, means that it is able to achieve a discount estimated now at about 20 percent. It would lose this monopsony power if people were given vouchers.

The authors suggest that medicare cannot use this monopsony power without limit. If the HCFA was to try to further reduce reimbursements through the DRG system, hospitals and other providers would start reducing services in exchange.

The second major problem that the authors look at is the notion of selection bias. By selection, I and they mean the situation when high users and low users of medical services selectively enroll in different plans, thereby exacerbating the difference in premiums.

They suggest that selection bias within a mandatory system will not be too great. There is some empirical evidence from voluntary systems that indicates that selection exists, but the authors propose that a classification of people by age, sex, and other factors could put them into reasonably homogeneous, that is, reasonably similar categories so one could avoid selection problems.

Now, with voluntary vouchers, the selection problem is substantially greater. In areas in which the voucher level was set at too low a point, no one would leave the medicare program, because the insurers who would be receiving vouchers would not be able to offer reasonable coverage. This would leave medicare with all the people in high cost areas and exacerbate the cost difficulty.

There are also potential gains, even to those people who have current medigap plans. These plans offer additional coverage to fill in the copayments and deductibles required by medicare, but they would have high administrative cost factors and profit. Such plans would essentially be eliminated through the voucher system. In addition, new plans would develop to replace the existing medigap plans because that is what the people would be buying with these vouchers; and it is argued that many of these plans would offer long-term care, which is one of the major things medicare beneficiaries would like to see added to their coverage. The voucher system would expand the pool of people eligible and thereby induce more carriers to offer long-term care.

In addition to the voucher plan, the authors suggest a restructuring as a medicaid program, and it is crucial to recognize that medicare and medicaid work together, and solving problems in one by putting them on to the other is not going to help anybody in the long run.

The authors suggest that one of the ways to avoid people choosing low option voucher plans, vouchers for which they would get a cash rebate and in essence go on medicaid when they become very sick, would be to cancel the automatic eligibility for medicaid for the elderly; then increase cash transfers to allow them to buy more comprehensive voucher plans. Medicaid might begin only after there is a much greater out-of-pocket loss—a larger spend-down, not a mandated automatic eligibility for medicaid of the elderly.

One of the problems in talking about a system as different from the current system as medicare voucher plan is: Would people enroll in it? What would they like? Here, the authors have gone through some substantially new research which is presented in some detail in the paper, and they indicate that people would like new options. They ran some small group discussions and found that vouchers are more attractive to the better educated; that many people say that they would be willing to switch plans, even if they had to change their doctor.

One of the things the medicare beneficiaries worry about is that their doctors are often older than they are, and they worry about their dying.

The extended coverage of HMO's seems attractive, and the concern about long-term care coverage was very substantial. The authors then go on and report on a survey of over 2,000 persons over 65 who are offered various different choices of plans and coverage at different prices. They were asked which ones they would prefer, and these differences then led to the interpretation of what kind of market share the various plans would have. There was a clear preference for plans that offered unrestricted hospital choice; and a small preference for plans that limited physician choice, if such plans offered a lower monthly premium. There was also a strong choice for long-term-care coverage. Interestingly, the size of the de-

ductible did not seem to matter very much as long as it was offset by the appropriate differences in premium.

The authors argue that their results indicate that the selection problems would be relatively mild. Based upon that, they estimate that under a voluntary plan about 50 percent of the population would opt out of medicare into one of the alternatives—either alternative health plans, HMO-type plans, which would take about 30 percent of the market and about 20 percent of the market would go to conventional kinds of insurance systems; only 50 percent would remain in medicare. If the system were mandatory, obviously there is no medicare option and the less-restricted plans would continue to be the most attractive. But alternative health plans, HMO's and similar kinds of plans that restrict choice, would garner 50 percent of the market.

The authors suggest a couple of implementation strategies. One, because a mandatory voucher system would require major changes and would require particularly substantial changes for people already in medicare, they propose to limit it to those people who are new retirees, and are newly entering the system for the next 3 years. However, recognizing that any 1 year's cohort of medicare beneficiaries may not be large enough to run a voucher system, they suggest waiting 3 years; put people on notice that everybody who will be retiring over the next 3 years will, 3 years hence, be put into a voucher system. The system would be voluntary to all existing, all current beneficiaries. Major educational efforts will be necessary and suggest that Government-sponsored brochures similar to those provided by the Federal employees health benefits program could be provided, and they suggest that there should be no limits on additional advertising and educational efforts by the voucher plan options. However, it will be necessary to require minimum benefit definitions and require a catastrophic stop loss to avoid low option plans from cropping up that really provide no coverage at all or no effective coverage, so that misrepresentation can be minimized.

The authors are here to make sure that that was not an unreasonable presentation of their paper. I have tried my best to deal with them fairly. In fact, if I were to be asked what options I would prefer, what choices and things I would come up with for a medicare system, clearly vouchers would be on my list for inclusion. However, I would include them substantially further down the road than I think the authors prefer.

In the interest of sharpening the focus of the policy discussion, for this conference I will concentrate on the problems and unresolved issues in the voucher program. It is important to focus on these problems because a voucher system is not, as economists would say, a marginal change. It is a major change in the system and a change that, if we enter into it, we may not ever be able to pull back from it. It is not like changing benefit coverage or coinsurance rates. It is essentially eliminating the current system and going to an entirely different one, and my feeling is that if we are going to do that, we had best be sure of where we are going before we go there. So I am going to try to identify all, perhaps too many of the potential weaknesses, and suggest that we try to address those now rather than while fighting for legislative approval.

First, I will discuss implementation issues, and then I will deal with some questions about equity. The most important one that concerns me is the adverse selection problem. The authors argue that it is not a major problem; yet, they refer to some research both from the medicare program and the private sector. Some employers with multiple option health benefit plans are having major problems with adverse selection, and employer-based programs have an advantage that a true voucher system would not have. Employers can cross-subsidize between high and low options. The high option in the Federal employees health benefit program need not have a premium that fully reflects its cost. In a voucher system, that cannot be done.

The voucher figures have got to be even more finely tuned than the authors suggest. The authors' suggestion for risk-adjusted vouchers neglects the fact that simple measures such as age, sex, and disability status are not nearly adequate to capture the risk differentials. We have seen that already. Even if vouchers were risk adjusted, there is an important question: Should the enrollee's share of the voucher cost be a fixed percentage, say, 15 percent, 20 percent, or should it be a fixed dollar amount? In other words, the voucher payment will only be so much, and if you happen to be in a higher risk category, that is your problem.

Either way, there are going to be problems, and they may very well be analogous to life insurance rates based on sex. The question is whether it is fair to put somebody into a category where there is some actuarial value that means their costs are going to be higher. There may be legal issues involved in that.

Mandatory vouchers clearly reduce the adverse selection problem from medicare's perspective, but it merely transfers the adverse selection problem to the private sector. If the vouchers are not actuarially fair, various insurance carriers may refuse to play the game. Why would they enter into the medicare market if they think the vouchers are going to be too low?

The authors report that many new plans are joining the current HCFA capitation demonstration. This may indicate substantial public spiritedness on the part of those new plans, or that the vouchers are not sufficiently well designed to avoid the killing by some entrepreneurs. HCFA will get smarter over time, and we may not find as many plans willing to enter the market.

The second issue is the attractiveness of alternative health plans. There are clear documented efficiencies for prepaid group practices. We don't know whether the differences in costs for other kinds of health plans, such as individual practice associations and the preferred provider organizations which we have recently discussed in the hallway as being as prevalent as unicorns—we talk a lot about them, but we haven't seen many—whether those cost differences represent true efficiencies or differences due to selection.

The authors suggest that alternative health plans would obtain a 50-percent market share. This is four times the market share in the largest single demonstration—Minneapolis-St. Paul. The marketing techniques and analytical techniques that the authors use may well be appropriate, but they have not been tested in a market as complex as health insurance, and especially a market based on an elderly population. In fact, the respondents' answer to

the authors' question concerning hospital and physician restrictions suggests that perhaps they don't understand the question or the implications of the question.

This question, having restricted choice of physicians, implies a restricted choice of hospitals because physicians only practice in certain hospitals, and my suspicion is that when respondents were asked the question they thought, oh, only one hospital in town; but if I have a choice of a limited number of good physicians, that has to include mine, because my doctor is a good doctor.

The administrative issues involved is the third point. How does one enroll those people who don't sign up? Employers face this problem all the time. They have employees who never voluntarily enroll in a plan even when it is free. What do you do with medicare beneficiaries who don't choose to use their voucher, and they become sick? Do they get enrolled automatically into one of the carriers? Are these high or low risk people? We are beginning to learn a little bit about that in the Arizona health care cost containment experiment.

The 3-year phasein is a very clever idea. But making the vouchers voluntary for people currently in this system brings in again all those problems of adverse selection that would occur in a totally voluntary system. Eventually, when all the existing beneficiaries die off, we will have a mandatory system.

The consumer educational requirements are substantial. I have tried to understand some of the health insurance policies that the University of California offers. And I am on the committee that writes those policies, and I don't understand them. I think the educational requirements are very important to consider.

The fourth major implementation problem has to deal with regulation, and just arguing that we are going to put this out into the market does not absolve anybody from the regulatory problems. Conventional insurance carriers are currently regulated by the States with 50 different degrees of effectiveness. Some alternative health systems in fact may even escape State regulation, because they fall between the cracks in the State insurance laws. However, it is necessary to protect the integrity of both the medicaid and medicare program.

The medicaid program needs to be protected from low option plans that bring people in, don't provide them with coverage, and the people therefore, end up in the medicaid system.

The medicare program needs to be protected from the political fallout of the kind of marketing abuses and plan failures that occurred in the early seventies in California with the prepaid health system. You need to make sure you do not establish a system that self-destructs in the newspapers rather than on the drawing board.

Finally, one needs extraordinarily complex monitoring plans to make sure carriers are playing the game straight and also to monitor selection, because the vouchers will have to be adjusted as plans find out more and more clever ways of selecting low utilizing enrollees. And that means that the HCFA actuaries will have to be more clever than the carriers. We are going to have a bidding system for actuaries.

I would like to get to a series of equity issues. In a sense, one of the problems with the voucher system is that it in essence, may

blame the victim. Normally, insurance is based upon community rating, the notion that everybody is in a single pool, and everybody will bear the average cost of expenditures.

Risk-rated premiums and vouchers imply more cost for people who are riskier in terms of their health status. That may be because they chose the wrong parents and have hereditary problems, and their premium will not cover the full differential.

It might also be the case that a conventional insurance plan in the area may be the only one to cover treatment at a reknowned cancer center. For example, a local plan may not cover treatment at Sloan-Kettering, which is considered treatment out of the area. In such a situation within a voucher plan, a conventional insurer will probably attract a disproportionate share of cancer patients. There may be a tendency for HCFA to not fully adjust the voucher to reflect that increased risk, especially if it cannot be easily measured. It is very easy to blame the resulting increase in costs on inefficiency and say it is not that they have a higher risk population, but merely an inefficient system.

The authors point out the problem of regional inequities in the voluntary voucher. One is national variation in medicare costs. Now, when we go to a mandatory system that merely implies in some areas the voucher won't cover nearly as much as it will in others, those people who happen to live in an area that has high medical care costs will end up having larger premiums.

The third set of inequities are educational inequities. Vouchers will clearly be difficult to understand. The less well-educated are likely to be misled. The authors' own survey indicated that the less well-educated were worried about being taken advantage of. The medigap policy coverage has problems; but in general, the major risk for the medigap plan is you pay too much for a plan that doesn't fill in all the gaps. The major risk with a voucher is that you might get into a plan that essentially leaves you with no coverage.

A fourth major area of concern is responsibility for the system over time. Currently, the medicare program has substantial monopsony power. It could choose to use that monopsony power either to force fee reductions or restructure the entire system. It might choose to lower the relative fees for surgery and increase them for outpatient services, for example, or make other kinds of system changes.

A voucher system relinquishes the monopsony power available to the medicare program, and also further fragments the providers. One can look at this in a political context and say at least in this arena, the providers are likely to be lined up in favor of the beneficiaries and against the medicare trust funds.

With a voucher program, and a further fragmentation of the providers, there will be no countervailing force to Government funding pressures. This may lead the Government to have the voucher values rise too slowly, relative to what they should have been rising, and thereby, increase the burden on the beneficiaries.

Once we go to a full voucher system, no one can really know what the system should cost, because you cannot pick out any one plan and say that is what the cost should be under normal circumstances.

You could always say, well, they are inefficient, and we should look at the most efficient plan. We don't know which plan is truly most efficient, because we don't know how much of it is selection and how much of it is true efficiency.

Vouchers promise capped Government costs. One can know in advance how much it is going to cost the medicare program because you know the total value of the vouchers. It provides an attractive competitive model which is very attractive from an ideological perspective. There is also a theoretical movement toward efficiency.

Adverse selection is my major concern, and we need to have demonstrations to test attractiveness of alternative health plans.

What if they don't attract 50 percent of the enrollers, but only attract 5 percent. Where will we be then? What about the administrative and regulatory feasibility of a voucher system?

To answer these kinds of questions, we need to start some demonstration projects to see whether the system will work the way we think it might or the way the authors suggest it might.

There are also concerns about the potentially inequitable features of vouchers. It is not clear how a voucher system will reduce program costs. We don't know whether or not the system will shift the cost burden to the beneficiaries, especially those that can least afford it, or will it result in more efficiency?

Whether an efficient voucher system can and will be designed is a question that requires political as well as technical judgment.

Mr. GINSBURG. Thank you very much.

I understand that the three authors of this paper are specialists, and each one is going to take a part of his allotted time for response.

Mr. FRIEDMAN. We are grateful to Mr. Luft for having carefully read the paper on the controversial subject.

If a medicare voucher system is expected to work well, it will need more of the useful suggestions, and the worrying that Hal Luft has provided, and our worrying was a little reduced because he was a gentleman enough a half-hour ago to let us see his comments, that he was going to weigh on the negative possibilities of vouchers.

There has to be a fundamental appeal to make it worth the effort, and there will be a lot of effort. We think there will be substantial demand for plans that restrict choice of health care suppliers, if that is associated with the lower premiums that it appears to be. We think the voucher system is a useful framework for some expanded benefits such as in long-term care where buyers can pay the full marginal price of their benefits but on better terms than currently in the medigap market.

We think some of the large expenses for the elderly in medicaid could be retargeted into the voucher system rather than as a separate competing, so to speak, health insurance system.

We recognize that a voucher system has some risk to the Government, in that they may wind up overpaying for people who opt out. We argue that this problem depends on the mix of plans offered. There has not been in many cases until the current demonstrations a mix of different plans.

Individualized vouchers depending on health status are conceivable, but that is a little too technical to spend a lot of time on today.

Finally, a suggestion: As credible alternative health plans emerge, the Government can simply raise the consumer cost and take other actions that are already under way reducing the value of its own coverage, so that its net cost stays parallel to what it is paying to the alternative health plans. This seems to us better in the long run than cutting voucher payments to the alternative plans with favorable experience.

The loss of the medicare monopsony power vis-a-vis hospitals is something of a drawback, but perhaps there are compensations. We think there could be. Private insurers may be better able than the Government to selectively enroll providers, contract with providers willing to put up with utilization review and risk sharing and so forth, to give physicians financial incentives to act more as gatekeepers.

I want to say a word about the speed of innovation. Two years ago in hearings about H.R. 850, a bill on competition, you had a senior vice president from Aetna Insurance representing the HIAA come out strongly against consumer choice and vouchers and all of that; and within 2 years, that particular company even has implemented in three sites a very interesting restrictive provider plan, and they have many plans for more. So I think the innovation is bubbling there under the surface, if not already evident.

Let me give my colleagues a chance to reply to some of the hard questions I did not reply to.

Mr. LATOUR. I would like first to make a few comments about Hal's remarks, and make a few summary comments about some of the important aspects of our research results and their implications for the viability of a medicare voucher system. One important point that is a clear issue of contention here is the issue of adverse selection. Hal thinks that is the major issue, and we agree that it is a serious problem, but I think Hal ignores some of our research results for adverse selection.

In our survey design, we were able to assess the likelihood of adverse selection by looking at people's utilization levels and health status and relating that to their choices of plans they would make under a voucher system; and under a voluntary voucher system we found no relationship whatsoever between either utilization levels and health status and selection of medicare versus some alternative health care plan. There is no evidence for adverse selection for medicare under a voucher system.

There is some evidence for adverse selection among some of the alternative plans. For example, some of the plans with long-term-care benefits might receive as enrollees individuals who have more chronic health problems, and there is some favorable selection for HMO-type plans with physician restrictions, as they are more likely to get people who have not used physician services as much as those who choose less restrictive plans. So there are some adverse-selection results under a voluntary system, but they do not affect medicare.

We also think that even though there might be some adverse selection effects under the voluntary system for the alternative

plans, these effects are not extremely large. Even for the plans involving long-term care benefits where the premiums, if the premiums needed to be raised—in order to compensate for adverse selection—based on our group interviews with medicare beneficiaries we suspect that the premium levels could be raised substantially and still receive significant enrollees in those plans. We do not necessarily see that adverse selection results in the elimination of that type of plan.

Speaking more generally about adverse selection, Hal just seems to draw greatly on the current experience with nonelderly health care plans, particularly in the employed sector, pointing out that a lot of employers are experiencing adverse selection. That may very well be true with employee plans. It does not necessarily mean that they are going out of business in all cases. Many of them are still surviving with premium adjustments, and it does not suggest that that will happen to medicare under a voucher system.

We do not find that result.

A second point has to do with respect to people's willingness to go into plans involving physician restrictions.

What we find to reinforce the point about the result is that people seem to be very worried about restricting hospitals to one major hospital in the area, and are not so concerned about being restricted to an extensive list of physicians as an HMO or to a single group practice.

We do not find those results surprising at all. They fit very much with some of the findings of our earlier group interviews in which elderly people indicated their physicians were likely to die or retire, and we found a great deal of negative affect on the part of the elderly towards their physicians, something we have never seen before. Many elderly think their physicians treat them rather badly, so there is a lot of incentive for many individuals to consider switching; and we are not saying everyone will switch into a restricted physician plan. We are predicting about 28 percent of people under a voluntary system and 50 percent of people under a mandatory system, so many people would still stay with their existing physicians. But there is enough of a preference on the part of a number of people, given the price incentives, to see that kind of switch.

Hal is not certain we will get 50 percent of people switching to alternative plans generally under a voluntary system. He asks, what if we just get 5 percent? But already we are seeing with the HMO demonstrations ranges from 7 to 14 percent, and a number of enrollees in the HMO demonstrations continue to rise. With additional promotional effort, plans that have benefits fitting beneficiary preferences that are likely to result from the kind of research we are doing, we are likely to see even greater percentages. The current plans offered in the demonstrations do not necessarily fit beneficiaries' preferences, and the kinds of research we are doing will allow offerers of plans to make better judgments about the design structure of the plan and get greater market share than they are currently obtaining.

Hal talks about the medigap plans as not being a big gamble, because it is supplementary coverage. He sees the voucher system as more of a gamble. But one of the things we advocate under a

voucher system would be the requirement for catastrophic coverage. Thus, mistakes people make in selecting plans under a voucher system would not have catastrophic implications. There would still be coverage that would bail them out.

Finally, a few summary points about some of the implications of our research for the viability of a voucher system. Certainly one of the most desirable aspects of this type of program is its enhancement of the range of options available to beneficiaries. Such freedom of choice increases beneficiary welfare because it avoids them being subjected to a standard Government health plan determined by people who are not necessarily subject to the benefit provisions of that health plan.

Our research suggests there is a great potential for the success of HMO plans with restricted physicians, and such an occurrence would bode well for the future of medicare.

Third, our findings concerning the likelihood of selection effects are very encouraging, as I noted earlier. We do not see a serious problem for the medicare program. The selection issues revolve mostly around the alternative health plans.

There is a note of caution I should raise with respect to adverse selection, and that is that the reason why we obtained a favorable result for adverse selection may relate to the wide variety of plans we examined in the study; and we need to see how the selection effects might change were one to see a given set of plans available in a market area. For example, it may be one of the reasons we see a favorable result for medicare is that the plans with long-term benefits of an extended nature get a number of people with chronic kinds of conditions.

We think sending out brochures is an important part of a voucher plan, but we know already there needs to be a fundamental overhauling of the process by which the brochures are written. They are extremely confusing to employed individuals. There needs to be a process by which these brochures are much more understandable, and the processes are available. We have developed some methodologies to solve that very problem.

There need to be extensive ongoing efforts over a period of time to educate people through some peer counseling efforts. There are some programs that HCFA has or has had relating to peer counseling for giving beneficiaries complex information to help them to make better choices. A whole host of educational benefits would be necessary. We argue for a phased implementation where it is not mandatory for current beneficiaries and people about to become beneficiaries would have time to learn more about health insurance and become better prepared to cope with a voucher system.

Thank you.

Dr. HUGHES. I will try to keep my comments brief. I would like to speak from the perspective of a physician, as well as an observer of the political process, and provide some historical perspective on the voucher issue.

When I first heard about vouchers a number of years ago as a physician, I was aghast. I could think of 99 reasons why they would not work and why people would be exposed to an inappropriate level of risk in making choices that could have deleterious implications for their health.

When we heard John Crosby elaborate on the topic about 2½ years ago, however, the idea began to hold some intrinsic fascination.

If you listen to the array of questions that Dr. Luft raises, an overwhelming majority of them focus on the low level of our current knowledge about implementing a voucher system, and the need for additional research to improve that level of knowledge rather than definitely articulated stake-in-the-chest arguments that vouchers just will not work. When one realizes, however, how we have learned from our research and that of others over the last year alone about the acceptability of a voucher plan and potential consumer preferences within it, it is apparent that we have come quite a way in developing some of the needed knowledge. I would support Dr. Luft's contention that were I looking for an immediate medicare reform, however, a voucher would be much further down the road. We were, however, placed second on this morning's program, well ahead of some of the more practical, currently implementable reforms; hence we are talking about vouchers now.

With regard to the recent increase in knowledge about vouchers, the ongoing HCFA medicare competition demonstrations represent a very important addition. They are just beginning to be evaluated, but experience to date suggests that some of the important issues regarding implementation that Dr. Luft raised are being addressed.

For instance, it would appear that in Miami the supply side responded very vigorously to the voucher option, with a number of highly innovative plans forthcoming, many with highly creative initiatives directed at satisfying consumer preferences through services not otherwise covered by medicare. The pricing issue in time can be solved, and the evaluation of the HCFA demonstrations may go a long way in informing us on that, as well as a number of the other questions Dr. Luft raises. Evidence would suggest that the plans were developed by others than simply, "entrepreneurs" with questionable motives.

From the political perspective, I was personally impressed by the results of research that showed that, given the opportunity under a voucher system, about 50 percent of medicare beneficiaries would opt out of the current program in favor of an alternative plan. There is currently a knee-jerk reaction by many people upon hearing of a voucher proposal to view it as politically unviable, if not totally unacceptable from one ideological perspective or another. If one talks, as we did, about the interest in such an option, it does not appear so radical an option as might be first imagined.

For instance, I was particularly impressed in talking to the medicare beneficiaries and in reviewing the results of our own survey at beneficiary interest in increasing consumer satisfaction under a voucher system through improved long-term care coverage, which is an area right now of serious national concern that we are not really addressing very well.

In closing I would like to echo Professor Ginzberg's earlier admonition that we try not to be too ambitious in this conference. I would, however, like to add a twist to it. Whereas he was counseling that you not have inappropriately high hopes for the effectiveness of certain reforms, I would like to counsel that you not be too quick to dismiss a voucher-like reform within medicare. The oppor-

tunities for consumer satisfaction are real and the tough technical issues blocking implementation in the immediate future may well in time prove to be readily solvable. I thank you very much.

Mr. GINSBURG. Thank you.

Now, it is time to turn to the panel discussion.

We will begin discussion of the first paper on cost sharing by Professor Hsiao. I will raise a number of questions to the panel. After that discussion panel members can raise additional issues that they find interesting.

A number of the panel members have asked me to point out to you that they are not speaking for their employers, that they are speaking their own views and that you should not attribute what they say to the organizations they are affiliated with.

I will introduce the panel first and get into the first discussion.

Congressman Henson Moore joins this panel on my far left. The next person is John Sinn, president of the Volunteer Trustees of America; Robert Patricelli, executive vice president of the CIGNA Corp., the product of the merger of Connecticut General and Insurance Co. of North America.

The next person is Stanley Jones, principal with Health Policy Alternatives, Inc.; Karen Ignani with the Social Security Department of the AFL-CIO; Paul Allen, director of the medicaid program in the State of Michigan; Professors Hsiao, Ginzberg, Luft, Friedman, LaFour, and Hughes; Robert Myers, professor emeritus at Temple University; Joseph Newhouse, chairman of the economics department at the Rand Corp., and Jennifer O'Sullivan, senior analyst with the Congressional Research Service.

Starting with the Hsiao paper, one reaction I had is that the outlay savings from a proposal by a cost-sharing advocate were not very large in comparison with the trust fund deficits. This brings up a question about the health-system effects of cost sharing.

The estimates in the paper were only talking about the transfers from the beneficiaries to the program, but I wonder if anyone on the panel could comment on what is the potential for reduced resource use in medical care?

We have had a lot of results, most notably from the Rand study, giving us static estimates of the effects of cost sharing.

They show that in the group with higher coinsurance, use of care was some percentage lower. Is there much of a chance that more cost sharing would have a dynamic effect on costs? Would we find not only an individual at a given point of time using less services with cost sharing, but would there also be an effect on the health care system?

Would costs grow more slowly?

Mr. SINN. I don't believe there is going to be an immediate effect on the system, under the plan that Dr. Hsiao last recommended.

We have got to remember that we do have an incentive in the present system for patients, for beneficiaries to look for the cheaper physician, and they really are not benefiting from that option.

The physicians, for the most part, do not take medicare assignments and therefore, unlike the hospitals, patients do have the option to seek a cheaper service, so I don't think there is any real saving that will come forward in that way.

What impressed me most about Dr. Hsiao's paper was his emphasis on means testing, which is a great beginning but perhaps should go a great deal farther.

Mr. GINSBURG. Could we hold off on that discussion? Will anyone else comment on the potential from a system of cost sharing?

Mr. NEWHOUSE. One's view of dynamic effects has to be heavily influenced by what one thinks is causing the sustained rate of increases in medical care costs. The introduction of new technology, including new procedures, has continued at a very high rate for many years, perhaps brought on in part by the extensive insurance coverage of the last dollar of the hospital bill that we have had, both for the elderly and the nonelderly. I believe this has been a major factor in accounting for the prolonged increase in cost.

If that analysis is correct, then more initial cost sharing of the kind that Bill Hsiao discussed is not going to much change that trend.

As Paul Ginsburg indicated, more initial cost sharing should lower health-care cost at each point in time below where they otherwise would be, but one is still looking at an upward trend, as long as insurance is in place that promotes incentives to bring on new procedures and new technology.

Mr. GINSBURG. Stan Jones.

Mr. JONES. I was surprised not to see the existing incentives mentioned by Mr. Sinn discussed in the Hsiao paper, because it is the case under medicare at present that if an elderly person selects a physician who does not take assignment and whose charges are above what is customary in the area or what is usual for the physician, they will end up paying a share of the bill out of pocket. Such patients would benefit a great deal by seeking out another physician who would accept medicare assignments, that is, accept medicare's payment under part B as payment in full.

I gather a very large proportion of physician's office services are paid for out of pocket by medicare beneficiaries. There is a lot of cost sharing already going on.

Yet, it is my experience that elderly patients do not do a very good job of shopping around for physicians.

Mr. GINSBURG. This may be a good time to move into the area of price shopping.

Ms. O'SULLIVAN. One of the reasons beneficiaries are not doing a good job of price shopping right now is they really do not have the information available to them. A physician provides a number of services and makes a number of different charges.

I had one comment about the Hsiao paper. For one service the physician may be rendering services at below average charges; for another service the charge may fall in the midrange, and for another service at the high range.

We do not have that kind of data, and if we did, I would hate to even try to give it to the beneficiary to read. At this point, we are trying to get information out to them about which physicians accept assignment. This is information that a lot of patients don't have now. I understand the Health Care Financing Administration has sent out instructions to try to correct this. However, I don't think there is enough data for a beneficiary to make an adequate choice.

Mr. GINSBURG. Other comments?

Mr. GINZBERG. I think there is a central point that should not be lost, and that is that in the United States, the medicare system and the insurance system generally are not geared to catastrophic coverage.

That is not the way we have been going. We have been trying to reduce out-of-pocket coverage which starts at a very low level, and unless I am mistaken, we are not going to revise our whole position and simply say that insurance will only worry about catastrophic at the far end.

That would represent a major change in the way in which we have structure of the system, not only medicare, but Blue Cross-Blue Shield, and commercial. We need to come to some understanding—whether it is prepayment that the customer wants. From medigap and everything else I see, they want first dollar coverage. We may get them to second dollar coverage, but they surely don't want only catastrophic coverage.

Mr. ALLEN. I think this paper on the benefit structure begs the question as to why medicare is in trouble and what can be done to solve it. If you look at the distribution of expenditures, it is predominantly for institutional care, and I don't think either the redistribution of benefits, the ceilings, or the voucher system will address the issue, and I don't think the client, frankly, has the commonsense or understanding to cope with this complex system.

Mr. GINSBURG. Robert Myers.

Mr. MYERS. I am a bit concerned that so much of the discussion seems to be that people do not shop around enough for price, which would seem to presume that all services are going to be equal, and there is no relationship between price and the quality of service.

I think that Bill Hsiao's suggestions that there ought to be more cost sharing, and that there ought to be more catastrophic coverage are very desirable. However, I do have problems with his basing the cost sharing on the efficiency of the provider, separated into three separate classes. How can you divide up the "sheep and goats" into those classes and have it be successful?

That procedure would seem to create a vicious circle of antiselection. Those who are deemed to be the least efficient are doomed to go out of existence, because they will be patronized less and less, and therefore get less and less efficient.

Ms. IGNAZI. I find it difficult to talk about the generic issue of shopping, without asking the question: Shopping for what?

If this conference is to be more than a political or intellectual exercise, we need to separate the kinds of plans that may improve the efficiency of the medicare system and improve health care for senior citizens, which is, I hope, our ultimate goal from those that offer a so-called competitive alternative that may save money in the short run, but cost far more over the long term.

We should banish the word "voucher" from our vocabulary and begin to talk about HMO's, the kinds of things that we know that do work, and distinguish those from the kinds of so-called competitive plans that offer cash rebates that may provide a perverse financial incentive for senior citizens on fixed incomes not to seek treatment for essential health care needs.

We must consider what risks are associated with encouraging people to shop for such competitive plans.

Mr. GINSBURG. Mr. John Sinn.

Mr. SINN. As a followup to that, I think it is important to realize why we are here and what this conference is about. There is a concept it seems to me that medicare is in trouble, and of course it is, but what is the reason it is in trouble? The reason is because it has been very successful. It has done exactly what it was planned to do in 1965. It has brought care to the elderly, lengthened the life of the elderly, and therefore has increased the cost to medicare. That is exactly what it was intended to do, and until we understand that and approach it from that standpoint, I do not think we are going to be able to solve these problems.

Mr. GINSBURG. The issue of medigap or supplemental coverage has come up many times. Some have mentioned it as an inefficient way of filling gaps in medicare because of the high loading expenses. Others have seen it as an obstacle to the increased use of cost sharing in the medicare program. I would like to ask for comments on that medigap issue.

Mr. NEWHOUSE. Medigap comes up every time there is a discussion of cost sharing in medicare. Many believe it vitiates the intent of the cost sharing. If one is serious about wanting to have cost sharing, one can in effect eliminate medigap by making medicare the insurer of last resort. Medicare would reimburse expenditures that were not reimbursed by somebody else. It would operate like the deduction on Federal income tax for medical care expenditures. If one is going to contemplate doing that, it seems to me one surely wants a catastrophic cap on medicare. Otherwise one is saying people cannot insure themselves against being devastated. Some will object that beneficiaries should be able to supplement their medicare policies if they choose. That is a tenable view, but it presumes that the desire on the part of the general taxpayer to provide health care benefits to the elderly is independent of how much supplementary insurance the elderly buy. That need must be correct especially for those who view medicare as a safety net. I want also to point out that, as has been said, medigap policies do have relatively high loading policies so that if one makes this change and provides catastrophic protection through medicare, one can say to the beneficiaries that the loadings are being saved on the medigap plans even though they are now liable for the initial cost sharing that medicare would entail.

Mr. GINSBURG. Robert Patricelli.

Mr. PATRICELLI. I find it somewhat perverse for us to rail to some extent against medigap. I suppose I should have a disclaimer here and say that CIGNA does not sell it. Yet experience clearly demonstrates that beneficiaries want to buy medigap insurance. I think it was Jefferson who said that in a democracy people do not like leaders who purport to be more intelligent than they are. If people want to buy medigap policies to avoid unexpected medical expenses and to budget their health care costs, then who are we to create obstacles legislatively or otherwise to the purchase of this benefit. Bill Hsiao's proposal on benefit restructuring is largely correct, in that there should be higher coinsurance and deductibles in medicare. Even if the impacts of some are vitiated by medigap, cost

sharing should be understood as a savings device for the Federal Government, and not merely an incentive device for medicare beneficiaries.

Mr. LATOUR. The issue is not should we prevent people from choosing medigap policies. They should have the right to choose whatever they want. The point is that they are in an environment fostered by coverage allowing them to purchase the policies at a premium rate implicitly subsidized by the Federal Government to the tune of 80 percent. So if you are going to subsidize it then I question the validity of that kind of system. It suggests a need for restructuring of medicare to prevent that implicit subsidization, and that is what, for example a voucher program would allow to occur.

Mr. GINSBURG. Mr. Myers.

Mr. MYERS. With regard to medigap policies, of which I am not particularly a strong supporter, I think that sometimes they are treated unjustly by talking about the high administrative expenses. One paper said that these are 50 percent of the premium. I do not think that this is true at all. The good medigap policies have an administrative ratio of around 25 percent as compared with SMI having an administrative expense ratio of only 8 or 9 percent. It is natural when only a small part of the risk is insured that the administrative expenses are relatively higher. The same thing happens if certain types of casualty insurance are purchased.

As to the so-called subsidization of medigap policies because the people who have them have greater utilization, I raise the question how do you know that these people would not have had greater utilization even if medigap policies were not available? I do not think that it necessarily is significant as to how much benefits those with policies compared with other persons because there must be considered the differences in demographic characteristics and utilization rates of the people involved, not merely the variable of whether they do or do not have medigap policies.

Mr. GINSBURG. Karen Ignani.

Ms. IGNANI. I agree. Medigap policies are not putting people in hospitals. Physicians are putting people in hospitals. Until Congress is truly ready to deal with this problem, we will continue to tinker at the margin by talking about medigap or vouchers or things totally related to the demand side of the equation.

Mr. GINSBURG. Let me move to another topic. There have been a number of proposals over the years to change the medicare benefit structure to improve the catastrophic protection. A few years back, when people were not as concerned with budgets, these were bills that were net additions to the program; these days, with more concerns about budgets, there are tradeoffs of increased costsharing at the front end in return for improved catastrophic protection.

Who would like to comment on those programs?

Mr. Sinn.

Mr. SINN. I don't think anyone would disagree with the fact that catastrophic health insurance is tremendously desirable. The question is, as I think Professor Ginzberg said, can we now impose it at a time when we are trying to find out how to keep this fund from going broke. And I don't think at this moment we can. We have got to do a lot of other things.

We may have to increase means testing and go much higher than Professor Hsiao's paper indicates. The \$24,000 may not be the limit. We may go way beyond that.

I think from figures we have obtained, there is quite substantial money to be made from going beyond that and means testing above it. We may also have to consider something that may be politically unpopular, which is to increase the age, the beginning of medicare. Sixty-five was a magic age in 1965, but it is changing for the reasons we mentioned earlier.

I think we have to do a number of these very dramatic real things to get changes in that system before we can begin to superimpose upon it new costs and new obligations.

Mr. GINSBURG. Robert Patricelli.

Mr. PATRICELLI. I believe that we should promptly revise the medicare benefit structure along the lines suggested by Dr. Hsiao. We have done some estimates of cost savings, if medicare were structured along the lines of cost containment-type plans that are currently sold by commercial insurers. Our estimates show that these very good packages will save medicare on the order of 15 to 20 percent of its present costs. We should also consider means testing medicare in some way in conjunction with a restructuring of the current benefit plan with catastrophic limits.

Mr. GINSBURG. Harold Luft.

Mr. LUFT. The catastrophic issue is entwined with the notion that Mr. Newhouse brought up about what is driving the system. Basically, everybody has catastrophic coverage, either medicaid, a deep-pocket insurance plan, or bad debt. Those are resource costs that get used. And I think one needs to ask whether the kind of changes in medical technology and what is being considered are appropriate, and whether there is any constraint on the use of new technologies.

Here the question is whether the medicare program will begin to ask some questions about the practice of medicine and what is appropriate, because I think that is the crucial issue in terms of catastrophic care. It is not copayments. You can't have a reasonable copayment for catastrophic care where the consumer is going to put any sort of a brake on expenditures. Typically the patient is horizontal and not making decisions at that point.

Mr. GINSBURG. Robert Myers.

Mr. MYERS. I am, and have for a long time been in favor of catastrophic protection under medicare. I think that is what the name of the game of insurance is about—to protect people against the risks that they cannot insure themselves against out of pocket. I think that there can be a slight restructuring of the medicare program so there is a little less first-dollar cost so as to make up for the catastrophic cost.

I would be very much opposed to any means testing of either the deductibles or any catastrophic cap for philosophical reasons. I think that social insurance programs should not have means tests. Further, from a practical standpoint, I do not think that there is any way of enforcing means tests in administering the cost-sharing provisions of medicare.

There just will not be good reporting of income of the elderly people, let alone people as a whole. Furthermore, there is the im-

portant element of lag. You may get a report of income of last year, but how do you know the person's income at the time when they need the medical care is going to be at the same level? I just do not think that it can be done practically, even if it were theoretically desirable.

Mr. GINSBURG. Perhaps I have held off the discussion of means testing a bit too long. Let's get into it now and call on John Sinn first.

Mr. SINN. I feel that means testing is really one of the major solutions to the problem that faces us, and I don't think it is going to be as difficult as the previous speaker just mentioned. We have faced that problem. The Congress faced it with social security, and I think the same problem has to be faced with medicare, and certainly those citizens who can pay a larger deductible and a larger copayment without being hurt should do so. It is part of the social web of our country that is consistent with our ideals and I see nothing wrong with it. There is a tremendous opportunity to put more money into the medicare trust fund by means testing and I applaud Professor Hsiao's bringing that matter up in his paper.

I just would like to go a lot further than he has indicated.

Mr. GINSBURG. Paul Allen.

Mr. ALLEN. I would like to respond from the perspective of a manager who manages a catastrophic health program, the Michigan medicaid health program. I think our statistics are symptomatic of the problem in terms of who is eligible for both programs. We have 9 million citizens, 1 million on medicare, 1 million on medicaid. About 10 percent of the medicare population are eligible for both. Medicaid is a means tested eligibility system and we are the safety net, we are the catastrophic coverage, and Mr. Luft made that point a moment ago.

I am a little confused by any extensive discussion on means testing other than the one that was addressed in the paper by Professor Hsiao in the sense that perhaps we could change through some percentage technique the amount to which a medicare eligible would have to contribute to their own care. However, I don't think it is a significant problem.

Mr. GINSBURG. Robert Myers.

Mr. MYERS. I am confused. One of the previous speakers talked about there being a means test in the social security system, presumably meaning the old-age, survivors, and disability insurance program. To my knowledge, there is no means testing in that program to any significant extent. There is a test of earnings for the payment of retirement benefits, but that is testing whether a person is or is not retired. So, the cash benefits program does not get into this problem of trying to find out what people's incomes really are, which I think is an impossible thing to do. People will not report their incomes, especially if it is to their advantage not to do so. I do not consider that the income taxation of OASDI benefits, as a result of the 1988 amendments, is a means test; it is merely proper tax policy to do so—just as is done for pensions and other forms of retirement income.

Mr. GINSBURG. Mr. Sinn.

Mr. SINN. It seems to me there is means testing in the current social security bill because, depending on your income, you may be

taxed on half of your social security benefits and that requires means testing to find out whether you are in that bracket or not. I think that is what the March legislation brought about.

Mr. GINSBURG. Let me raise the question, if there is to be a means or income test in the medicare benefits structure, should it be a test on premiums or a test on the benefit structure?

Karen Ignani.

Ms. IGNANI. I don't think there ought to be a means test on eligibility for medicare benefits. For such a proposal to become law, we would have to cross a threshold that the majority of Americans are not yet prepared to cross. That is, the political decisionmakers in our country would have to be prepared to face senior citizens and justify changing the compact on which the social security program and the medicare program were based.

I think this is a fundamental point that we are not incorporating into our discussion. It is fine to debate these issues from the standpoint of economic theory, but we also have to debate the issues from the standpoint of political reality, and that reality is that senior citizens don't want means testing, individuals who pay for the system don't want means testing in medicare when they reach 65. Therefore, I don't see that there is any popular support for means testing, nor do I think that we should means test the medicare program.

If you impose a means test which seems reasonable this year because of the fiscal crisis in medicare, income thresholds would soon be raised to unreasonable levels that will function as a financial barrier to treatment and result in fewer people seeking care, which could cost us more money in the long run. I hope those who urge that medicare be means tested consider the longrun implications of such a major policy change.

Mr. GINSBURG. Are there any issues that members of the panel would like to bring up? First on the Hsaio and Kelly paper.

Jennifer O'Sullivan.

Ms. O'SULLIVAN. In the discussion on the cost sharing, we are assuming that the beneficiary is always going to be paying the cost sharing out of pocket. I think there are a lot of instances where the beneficiary may not make the required payment and the provider may end up having to assume this as a bad debt. The question is: Is medicare going to pick that up under the system that we are going to design, or not? But I think it is an important question to raise.

Mr. GINSBURG. Joseph Newhouse.

Mr. NEWHOUSE. In all the discussion of the catastrophic cap, keep in mind that for the most part we have omitted the long-term care area. I think the aged have a strong fear of being wiped out by the potential need to enter a nursing home for an indefinite period. Nursing home costs in real dollars are up by a factor of 12 in the last two decades emphasizing the legitimacy of this fear. Roughly half of nursing home costs are paid for by medicaid; it seems likely that these costs are something of a time bomb for the deficit in the Government budget.

Mr. GINSBURG. Paul Allen.

Mr. ALLEN. We have been skirting that issue and I would like to respond a little bit. I think there is a lot of misunderstanding about the relationship between medicaid and medicare. Medicaid is the

catastrophic coverage for long-term care which is probably the ultimate health catastrophe we can suffer, being confined for the rest of our life to a long-term care institution.

Most of the nursing home industry in this country is supported by the medicaid program. So 70 percent of all the beds in Michigan are supported by medicaid, and most of the people, 99 percent of them in those institutions are medicare eligible also, and they do contribute some of their own income and medicare ambulatory benefits to their own catastrophic care, but the majority of it is covered by medicaid now and would be for the future, so I don't think it would impact on medicare per se.

Mr. NEWHOUSE. But it will impact on medicaid, which will in turn impact on the Government budget, and a major reason for concern with medicare is its potential for enlarging the Government deficit.

Mr. ALLEN. That is the point I was trying to make earlier. The anatomy of the health care problem is an institutional problem—acute and long-term care. If we are going to address any efforts to minimize our problems in both programs in the future, we have to look at the institutional setting, not as to where you spend a voucher or how you redistribute benefits.

Mr. GINSBURG. Anyone else on this point?

Eli Ginzberg.

Mr. GINSBERG. Since I am trying to understand what is being said, maybe it would be helpful for the audience and to myself to say what the discussion up to now has stressed. We have a very big gap and we can move on it by trying to get more money to close it, but Professor Hsiao's paper really didn't indicate that you could do that.

We then moved to a notion that perhaps we could change the medigap, medicare relationships, and get more money in that way to help the Government. Then we came over to means testing and then opened up a whole different game.

The other part of the discussion is that we addressed the way in which health services are organized and delivered, and tried to get a better hold of costs. That is where Joe Newhouse began. Because if you don't do anything with the parts of the system which are driving costs, you are not going to get many results from financial manipulation. So you can decide either to play around with finances on the one side—and there are a whole series of options—or you can really try to move to long-term fundamental reform by focussing on costs.

Mr. GINSBURG. John Sinn.

Mr. SINN. Remember, something very dramatic has happened to the delivery system this year—we have gone to DRG's. Where that is going to lead us, nobody I am sure on this panel, has any real idea.

Mr. GINSBURG. I think the next panel knows.

Mr. SINN. Well, I will await the next panel then. But I think it is important to know that everything we are talking about is really in the past and until we see what the effects of going off cost reimbursement—and some of those effects I think will be very good for the fund—I don't think we really know what the end results are going to be.

Mr. GINSBURG. Ed Hughes.

Dr. HUGHES. I would like to speak to the earlier comment that people don't seem to do a good job at shopping for health care. It is important to point out that in the purchase of medical care, we are not purchasing toaster ovens or similar products.

There are travel costs and time costs involved that are not often factored in, and should be. Most critically, however, the purchase of a service from a physician with knowledge of an individual's health and his/her family is potentially characteristic of a very different product than that being purchased from a physician one has not known before, but who may be charging a lower fee.

Many concerned and intelligent observers of the health care industry have long articulated that continuity of care is an important element of medical care, significantly enhancing its quality. I believe that consumers are aware of this. It is important that we realize that there are complexities in the purchase of health care that go beyond the typical purchase of consumer products. Unless these are borne in mind, we run the risk of seriously undermining the sophistication of our discussion and ultimately the validity of any recommendation forthcoming from it.

Ms. IGNANI. I think we need to reform the entire system. However, there are a number of things we ought to consider doing in the short run that would improve the efficiency of the program and probably reduce costs significantly.

It strikes me as being somewhat ironic that health care professionals are constantly talking in all parts of the country about trying to wrestle with the problem of demand as it relates to cost, but yet, they don't seem to be very committed to demanding from medicare the kind of efficiency that is being demanded from private insurance.

Why not incorporate into medicare mandatory second surgical opinions, concurrent review, preadmission screening and testing and all the other initiatives which are working effectively in the private sector. They don't cost money; they are fairly easy to implement; and we ought to do them immediately.

Tightening up the program in the short run, without reducing benefits, help us to get to the point where we are ready to deal with the long-term reimbursement issues.

Mr. GINSBURG. Let's ask Bob Patricelli to describe his experience on the private side, and whether he thinks it is transferable to medicare.

Mr. PATRICELLI. A lot of things from the private sector are transferable to medicare that can and should be done. I dispute Eli's contention that benefit restructuring is somehow not worthy of being done if it doesn't focus on the engines driving health cost inflation.

It seems to me there is an equity logic and an ability to save the Government some money in the financing of the medicare system if a reasonable benefit restructuring is undertaken along the lines suggested by Bill Hsiao. Although, I would stop short of varying co-insurance and deductible rates by provider cost category.

However, when it comes to dealing with the things that are driving health cost inflation, we have mentioned HMO's a couple of times, and CIGNA operates an extensive chain of them.

I really do think that one pretty easy thing for the Congress to do would be to remove the heads I win, tails you lose rules concerning medicare's 95-percent capitation payments to HMO's. If the HMO is able to save money, it has to give it back to medicare or plow it into enriched benefits. There ought to at least be a sharing of those savings with the plan. I think HMO's can achieve cost savings with the right kind of incentives from medicare.

Mr. GRNSBURG. Paul Allen.

Mr. ALLEN. I was going to save this for later, but I might as well make the point now. In Michigan, 25 percent of all the ADC population in Detroit is in a health maintenance organization, and has been for a couple of years. One out of every four. And the savings are obvious. The number of inpatient days are down, drug costs are down, ancillary costs are down, there is a real saving, approximately 10 percent over fee for service expenditures.

And we need the same kind of emphasis for medicare soon.

Mr. GRNSBURG. I would like to give Bill Hsiao a chance as the author of the paper to have the final word before we move on to the next one.

Mr. HSIAO. I will comment on four major points made by the commentators. I think there is a fundamental philosophical difference here as alluded to by Joseph Newhouse earlier, that is, how can we impose some constraint on the health care system. Joe said the system is technology driven and I will put it differently. The system is technology driven, but more importantly there are no effective constraining forces on the system. The providers are given an open checkbook and they fill in the blanks and get paid.

So, the question is, Do we constrain the health system through regulation as Karen suggested, or perhaps we can do only so much through Government regulation and we also need to impose some market constraint through the consumers at the same time. I think the philosophical difference between the various comments is that some people believe only regulations have an effect while others believe consumers can also make a difference.

Now let me respond to a number of comments that our proposed reforms do not save a large amount of money for medicare. That's true. Our proposal does not totally solve the financial crisis of the medicare program. My coauthor believes that the financial burden of medicare shouldn't all fall on the beneficiaries. Under our proposal, the savings will amount to more than \$3 billion per year. The saving would have been greater, but we proposed to use a part of the savings to provide catastrophic coverage to the elderly. If catastrophic insurance is not incorporated, the savings to the medicare trust fund could be as large as \$6 billion, that's a significant amount.

I like to stress that our proposal improves the benefit to the medicare beneficiaries by providing catastrophic protection. Many people seem to have overlooked that part. I think the major function of any insurance plan is to protect beneficiaries from financial ruin. Currently, the medicare benefit package does not offer that protection.

Therefore, I think it is time to reform the current benefit structure to enhance the insurance function of medicare rather than being a plan to prepay the small bills. Variable cost sharing has

the potential to yield savings to the health system in the long run. In the short run I agree that there won't be large savings produced by the variable coinsurance rates, but in the long run, there could be substantial savings if the market forces do work in some degree.

The second major question raised by the commentators is whether people do or do not shop for lower priced providers. Karen pointed out that beneficiaries are not shopping now while they have to pay the amounts that physicians charge which exceed the prevailing limit. I would like to suggest that is not a good evidence to show people would not shop. Let me offer three reasons.

One, people lack price and quality information today. They don't know who is the high-cost provider and who is the low-cost provider. That is why we propose that the Government serve the role to disseminate that information to the people.

Two, today many physicians do not collect from the patients the portion of their charge that is not paid by the medicare program. Physicians write that off as bad debts.

Three, I would like to remind you that about 80 percent of the American elderly today have supplementary coverage to fill in the medicare's cost sharing. Two-thirds of the elderly have bought medigap, and roughly about 12 to 14 percent of people are covered by medicaid. Therefore, about 80 percent of the elderly have filled in their deductible and coinsurance today. There is no reason for them to shop with full insurance. Under our proposed scheme, beneficiaries without full insurance may shop for the lower priced providers.

I like to add that in one of my research projects, I had interviewed dozens of physicians. They frequently mentioned that they do shop for their patients. When physicians know their patients have to pay a large portion of the cost, then they do try to choose the low-cost providers for their patients.

The third issue raised by the commentators is means test benefits. Some people have labeled our income related catastrophic coverage as means tested benefit. I think there is confusion about the words "means test," that's an emotionally charged term. If you will permit me, I would like to define this term. Means test should be defined as a person's eligibility for benefits depending on his or her income level. That is not what we have proposed here. We are not proposing that the elderly's eligibility for medicare benefits depends on their income level. Instead, everyone will be eligible for medicare benefits, but the level of benefits a person is eligible for is related to his or her income. That is very different, in my opinion, from a means test program like medicaid or food stamps.

Social insurance has always had its benefit related to people's ability to pay. The cash benefit is related to people's income during their working years, and those with lower income get a higher proportion of benefits in relationship to their contributions. I don't understand this argument that if we relate medicare benefits to people's income, then we have violated the principles of social insurance. I think that is really an illogical argument.

Lastly, I'd like to comment on medigap. The widespread of medigap coverage seems to indicate that many people are risk averse. They want to buy supplementary insurance to have first dollar comprehensive insurance. We suggested in our paper that the

reason for some people to buy medigap is because the current benefits don't provide catastrophic coverage. The risk is open ended. Therefore, if we limit the amount of risk people have to face, then some elderly may not buy medigap.

Mr. GINSBURG. Let's turn to the paper on vouchers. I don't have as many questions to ask. I would like to depend more on the panel for topics. Let me begin by saying that I can see three types of health plans that people—beneficiaries—might purchase or elect if they had a voucher. One would be a traditional plan like medicare, possibly with a different benefit structure.

Another might be a traditional plan with much more stringent utilization review requirements, preadmission testing requirements, et cetera, such as Karen Ignani mentioned before.

And the third type, which gets the most attention, would be the so-called alternative health plan, namely, a health maintenance organization or something like it, something which has very different incentives for the providers than the fee for service system.

Possibly we could begin by having the panelists comment on the viability of mainstream medical care under alternative health plans.

Paul Allen.

Mr. ALLEN. A bit of a reatatement. Our experience: we have been doing our best in the past couple of years to make ends meet in our health insurance program for the poor, just like medicare has been doing its best. However, we have been able to go a little further in exploring alternative health care delivery systems. We have done this through HMOs, through capitated plans and through primary care networks. Frankly, this is the way of the future if you are going to constrain a rate of growth, and that is all you can hope for, because health care costs are going to grow, particularly for the aged population.

Now, in reviewing this voucher paper, the first thought that came to me is how big would that voucher be. I mean, what would its value be, say in Detroit, Mich., which is a very high cost health care area, even for medicaid which is allegedly not paying its fair share. I would estimate the voucher would have to be about \$2,500 a year for a person who was eligible for both medicare and medicaid.

That is a significant amount of money, and it doesn't include long-term care. Most of that money under a voucher system would have to go toward choosing which acute hospital you wanted to go to if you were forced into that position. Given the options in the marketplace, I didn't feel that the beneficiaries concerned have the degree of sophistication required to make those decisions intelligently.

Mr. GINSBURG. Mr. Newhouse.

Mr. NEWHOUSE. I think there is a presumption in some quarters that HMO's or alternative delivery systems, or whatnot are some kind of magic bullet that will stop the trend in costs, and I would like to point out that the cost savings I think are somewhat similar in one respect to the kinds of cost savings one gets from more cost sharing, that is, costs at HMO's tend to be lower at each point in time, but Hal Luft wrote an article about a decade ago that showed the trend in HMO costs were similar to the trend in fee-for-service

costs. I think that the question of what to do about the trend in costs really boils down to a point that was in Irv Wolkstein's paper, which is what do we really want to pay for?

We are a well to do country. We want to pay for more than many other countries want to pay for. We may not want to pay for as much as we are paying for now, but the willingness of people to join HMO's in ever increasing numbers, despite the rate of increase in HMO premiums, suggests that maybe people do want to pay these costs, that there is a sort of market test there.

We have not seen HMOs coming in and saying "we are going to hold costs down by not providing new technology," and then seeing people join them. One must, of course, be very tentative about this inference because of the small market share of HMO's.

Mr. GINSBURG. Karen Ignani.

Ms. IGNANI. Generally I think where you come out on the question that you pose, Paul, is fairly closely related to where you stand on competition versus regulation. I submit that in order to solve the potential permanent short fall of revenue in the medicare trust fund, we have to come out somewhere in between.

I don't think there is anything wrong with medicare beneficiaries going into HMO's, quite the contrary, although I certainly agree with many of the comments that Joe Newhouse made. I don't think that all HMO's are panaceas. I prefer the group practice plan with strong incentives for physicians to control costs, but certainly there are other issues with which we must wrestle.

On the other hand, I think putting medicare beneficiaries into a situation where they would cash out their medicare benefits would be very dangerous. For example, beneficiaries on the margin, without much disposable income could have a strong incentive to go into a low option plan, because in return they would receive a cash rebate.

Mr. GINSBURG. Robert Patricelli.

Mr. PATRICELLI. I certainly would agree with Professor Newhouse that HMO's aren't for everybody and they aren't the solution to everything. But nevertheless, I think the evidence shows that the escalation of HMO premiums has been less in recent years than it has for the typical insurance.

I would like to separate the issue of the desirability of alternative delivery systems from how to stimulate them. We are serving 70,000 medicare beneficiaries in HMO's under cost-based reimbursement, and I hope we will be able to treat more beneficiaries under the new TEFRA provisions. I really don't think, Paul, that it is necessary to try to plunge into a voucher system in order to get to the flowering of numerous alternative delivery systems. We are seeing it now.

Mr. GINSBURG. Well taken.

Does someone want to follow up on that point?

I was bothered by the voucher plan. According to the Inquiry article which I referred to earlier, we have some portion of 1 percent of the elderly now in HMO's on a prepayment basis. So I would say we have been zero successful to date in encouraging HMO's to deal with the elderly. We don't know anything about that. All we know relates to a cost reimbursement basis.

Therefore, to suggest that 3 years from a zero base we are going to put a mandatory voucher system in place is something that I hope the gentlemen in this room who have to legislate will not take seriously, because I can't take it seriously given the complete absence of any experience with that.

Jennifer O'Sullivan.

Ms. O'SULLIVAN. I think we have pointed out in some areas the country HMO's are working very well. However, in other areas of the country there aren't really operational HMO's that we could really turn to. How are we going to give people a choice 3 years down the road if there isn't an HMO in the area? In some areas there may be alternative health plans. But I suggest that that is not true across the country. And then what are you going to do for the rest of the people? Are you going to give them a voucher to buy something comparable to what they already have under medicare at perhaps a cost that is significantly higher than what they are getting now under the current medicare program?

Mr. GINSBURG. Now, Stan Jones.

Mr. JONES. I would like to offer just a couple of thoughts about the theoretical role vouchers might play in encouraging competition and how they may be prevented by the problem of adverse selection.

One, the only reason that I can see that is appropriate for our society for offering vouchers to the elderly would be the conviction that we would encourage a kind of price competition among third-party payers, be they HMO's or insurers, such that those payers would be motivated to do something to hold down health care costs. Specifically, we would like to see them work to constrain hospital and physician use of services, or make them more efficient, so that their insurance premium can be low enough to attract folks who have vouchers in their hands rather than letting them go to the insurer or the HMO down the road. Incentive for price competition is, in my mind, the only legitimate reason for a voucher.

Now, there are other reasons for offering vouchers to the elderly, more nefarious ones, and Hal mentioned several. For example, we could give out vouchers, but then tie their value in future years to an unreasonable rate of increase, such as the Consumer Price Index, and blame the insurance industry for not holding down health care costs enough so that the voucher will cover the entire premium. That is a great political strategy for holding down Government costs. It is a means of passing the buck between the public and private sector. But it does not hold down the cost of care to the individual, and it is not a good reason for passing a voucher program. The only legitimate reason is to encourage the kind of competition among insurers and HMO's that really holds down costs in the long run.

However, there is an obstacle in the way of constructive competition, and it parades under this phrase "adverse selection." I would suggest to you that there is enormous evidence available, that this is in fact a huge problem, perhaps an insurmountable problem.

I have watched a number of actuaries review the various plans in the Federal employees health benefits system, which I am sure most people in this room are very familiar with. The premiums for some plans in that system in some cases are quadruple that of

other plans. Plan A can be four times as expensive as plan B, while the range of real actuarial value is closer to 10 to 15 percent different. It doesn't take an actuary more than a few minutes to review the benefits against the premiums and conclude there is enormous adverse selection going on here, enough selection that an insurer can compete much more effectively by enrolling good risks than by trying to hold down cost.

Put it another way: An insurer can work like crazy to hold down doctor and hospital costs and hold his premium down a dollar, or he can be clever at selecting his subscribers from among this huge Federal employee group and hold it down \$10.

Now, given the fierce competition by scores of carriers out there, including HMO's, you can figure out what they are going to do. The problem we have in a voucher system is finding a way to encourage insurers to compete by holding down the costs of doctors and hospitals, and not by selecting carefully whom they are going to underwrite.

Many people have struggled in the last 3 years in the FEHBP system to find a way to correct for the adverse selection problem, such as adjusting the premium for age, sex, and area of the country. But all these factors account for somewhere between 12 and 25 percent of the adverse selection problem; we simply don't know how to explain the rest. It may be that some people simply are inclined to use more health care than others, and which insurance plan they choose is determined by marketing and other things insurers are getting better and better at.

I am not sure we know technically how to solve the adverse selection problem with vouchers.

We do have a system under medicare that allows elderly people to select HMO's or CMP's—competitive medical plans—and move into those plans. I think we should enrich that program and go slow on the voucher side.

Mr. GINSBURG. Paul Allen.

Mr. ALLEN. I think it is appropriate to give you a little reflection on the medicare health problem as viewed from a medicaid perspective again. I don't think a lot of people realize that more than half of the medicaid budget in this country is spent on medicare eligibles, and that is because the health care problem for people who are qualified for medicare is sort of a three-strata problem.

The first stratum is the acute and ambulatory care, which we all know are common to our own health problems. The second one is long-term care which is unique to the population at risk, the aging population, the frail, the people that are dependent on others for support. That brings up long-term care and all it means. The third part is the in-home social aspects where health care needs of the elderly sort of blur into their social support needs. To try to split up these three strata into a voucher system would be most difficult; in fact, I think it would be impossible.

Mr. GINSBURG. Joe Newhouse.

Mr. NEWHOUSE. I would like to start from the premise Stan Jones started from—the goal was to encourage price competition. And I would like to take an analogy to illustrate the selection problem for those of you that find it too arcane to worry about that may also point the way toward one kind of way around it, and that

is to think about supermarkets. When you decide what supermarket you want to shop at, you think about the unit prices of whatever you want to buy, the price of a pound of oranges or a pound of hamburger, a pound of coffee or what not. And then you take into account the amenities at the supermarket—how fast you can get through the line, and so forth. And then you decide which supermarket to go to.

What you are doing is deciding the price that is entering into your mind is unit price, price per unit of food. Now, the analogous—or the difference, I should say, with the medical care scheme we have been talking about is that prices—instead of the price you pay being what you buy times the unit price, it would be something like the price you would pay to go to one supermarket would average the total bill of everybody who goes to that supermarket. So if you happen to pick a supermarket where people had large families and took out many sacks of groceries, you would pay a lot to go to that supermarket.

That, in turn, means that the supermarkets, when they are competing, as Stan said, they are looking for people that don't take out many sacks of groceries with them when they leave the supermarket, and they are not necessarily competing on the unit price of a price of a unit of food that they are competing on now.

I think there is evidence that selection is an important issue, albeit with the nonelderly. We haven't really, for obvious reasons, tried it very much with the elderly.

I would like to also comment on something—well, then take the supermarket example one step further. This could point to a way around selection. If alternative plans or alternative providers—for example, hospitals—if the prices that consumers faced for them were on the basis of some notion of a unit price rather than the price times the quantity of services brought, then one could have price competition.

Now, of course, there are lots of problems in defining what the unit price is. Some of those were brought up in the discussion of Bill Hsiao's plan, which I might call the antisupercharger plan. But, nevertheless, one does get around selection in principle, but, as usual, there isn't a free lunch here. If we just vary on the charges to the consumer on the basis of unit price, as we do with supermarkets, then there is no incentive for providers in this case to economize on procedures; that is, you may charge only a little bit for a lab test but you just do lots of lab tests.

Well, once you try to introduce incentives to economize on the use of lab tests, I suggest, then you get into the selection problem, because then you make it desirable to want to have patients who don't require a lot of lab tests.

Now, one other point. Steve LaTour said at one point that even if there was selection, plans didn't go out of business. Well, maybe so. But that is really, I think, missing the point.

The point is that if we are going to have price competition and it is desirable, we want the prices that people face, as Stan Jones said, to reflect some notion of the resource costs involved in treating the people rather than the prices of treating everybody else in that plan, meaning price times quantity of services.

Mr. GINSBURG. Robert Myers.

Mr. MYERS. I really cannot see any advantages for the voucher system. I think that the choice that is given to people is just too difficult for them to make with the knowledge which they necessarily can have. Even if this basis were phased in so that the existing elderly did not have to mandatorily make a choice, I still see great difficulties.

The original medicare proposal had a three-choices option as to the benefit package. Congress, in its wisdom—and I am not being sarcastic, but truthful—said that there should be a uniform medicare program insofar as its benefit provisions were involved. I think that choice was right.

Even though the vast majority may not choose properly (if you can define "properly"), there still will be a substantial minority who will select against the program and will increase its costs that way. I think that the Federal employees health benefits program has had its problems in this way. Many have referred to FEHB as showing how the voucher system could work well, but often the individual under FEHB is put in a bind in choosing between the low option and the high option. The big difference in the premium rate is not really worth the difference in benefits.

If the individual under FEHB wants a catastrophic type of provision, a cap of some sort, and takes the high option, the difference paid for the high option is, to a considerable extent, not worth the extra benefits obtained, because the people who have taken the high option are the higher users of the normally first-dollar costs.

I see great difficulties in a voucher system. Also, I think that it is quite true this issue can be separated from the question of the desirability of having more HMO coverage. I think that is a separable matter, and the question whether HMO's are better or not is really debatable. It is not as certain a matter as some people here are saying, that HMO's are most cost-effective.

With regard to what many people have said about competition leading to great efficiency, you also must consider the probably imponderable question, "Would this also lead to lesser services, because the costs of a health plan can be reduced by giving less services, by having more queueing by discouraging people from coming for necessary services. How this can be controlled, I certainly cannot say, but it certainly is as much of an element for consideration as promoting greater efficiency (which always, of course, is a desirable goal).

Mr. GINSBURG. Harold Luft.

Mr. LUFT. Thank you.

I think it is important in considering the adverse selection question to recognize a couple of points. One is that a very, very small fraction of the individuals account for a major fraction of the cost. In the University of California Blue Cross plan, we found that four-tenths of 1 percent of the claimants, excluding those people who never submitted any claims, accounted for 21 percent of the expenditures. You can never identify those people before the fact. There are just too few of them to be able to recognize.

The second point that we found is that there is incredible inertia, again dealing with the University of California population, which may perhaps be somewhat less intelligent than the average. They had a choice of two fee-for-service plans, with identical benefits.

The only difference was whether it was a Blue Cross card or a Prudential card. One-third of them were in the wrong plan, given the net premium costs that they had to face. It turned out the carriers had different relative loadings for single versus family. One-third of them were in the wrong plan and didn't switch. That suggests that you can ask people which plan they would choose, and when they have to make a choice they may make the right choice. If you just have an open enrollment season, that is usually not the highest priority for people to look at.

I think the third point dealing with the notion of competition in vouchers is that more is not necessarily better. When we are talking about plans that are intended to change provider behavior, what kind of clout does an insurer have when the insurer only has 1 or 2 percent of the market? They can't tell providers to change their behavior with the threat that they will refuse to send them patients or things of that sort. They have got no clout in terms of market power.

On the east coast, Blue Cross and Blue Shield currently have substantial clout, 60 percent or more of the market. They could, if they wished, lean on providers to change their behavior, but if we are talking about a voucher plan, that is encouraging many, many, carriers, then each one will have a small market share as on the west coast, and none of them have enough power to lean on a group of providers and tell them to change their behavior. It is not clear where one should choose the optimum in terms of number of different options under the voucher system. It is not clear that we want many flowers to bloom. A couple of strong trees might be far better.

Mr. GINSBURG. Karen Ignani.

Ms. IGNANI. I would like to turn to the supermarket analogy because I think it is illustrative of a fundamental problem with the voucher system. When we go to supermarkets, if the prices are good, the food is fresh and the lines are short, we consider this a good supermarket, but I don't think we can compare our ability to choose supermarkets to our ability to judge the quality of the medical care system. In fact, just the opposite is probably true. If one goes to a doctor's office and has to wait for some time, there is a tendency to think more highly of the physician. In other words, if the wait is so long, then he or she must be good. Such thinking illustrates the problems many have in choosing and evaluating quality of care. For competition to work, people need to be able to judge quality of care, and we definitely haven't reached that point.

One of the things that should be noted is that people on all sides of the political spectrum want to encourage medicare beneficiaries to join group practice plans because they would not have to do a great deal of shopping or wading through paperwork and, in return would get better benefits. Similarly, we might also consider allowing medicare beneficiaries, in States where medicaid directors have negotiated contracts with providers, to join such plans, which would avoid the potential problems associated with putting individuals into small insurance plans, but would give them the option to join a plan that someone else has evaluated, and which offers a more comprehensive benefit package. There would have to be some

extraneous evaluation and standards that would have to be met to assure that the quality of care will be there.

Another approach would be to allow medicare beneficiaries to also enter into plans that have been developed for State employees. Very few people have considered such arrangement, which would make competition work for the beneficiary. Therefore, I wouldn't urge that we discard competition, but I would urge that we be very careful about the application of that term.

Mr. GINSBURG. Stan Jones.

Mr. JONES. A few thoughts on how the elderly presently make choices. The kind of choices they currently make seem to me relevant to whether or not they would make good use of a voucher.

No. 1, under part B of medicare, it is the case that there isn't very good information available to the elderly on what your doctor is charging versus someone else in the community, and what share of the bill you will end up paying is a result of a higher than customary charge. However, the data is there. If you look up the code on the back of the form, even though it is printed lightly, you can find in fact what amount of the bill wasn't paid because the physician's charge was over the customary fee. My mother figured that out. She is 80, but she figured that out.

Nevertheless, the elderly, from what I have seen, are very slow to abandon their physician even if they are charging them more than is customary in the area.

No. 2, under the FEHBP, the Federal annuitants who already have medicare coverage, subscribe in large numbers in the highest cost insurance plans, and pay higher premium out of pocket. There have even been efforts by OPM in the past, and by some of the insurers involved, to send letters to the elderly who make this choice, advising them they would be much better off in a lower cost plan which would still pay most costs not covered by medicare. Yet they persist in staying in the program that they are in, for all kinds of reasons. That is the choice they make.

Finally, the elderly do buy supplemental insurance. You can tell them it is best to pay deductibles and coinsurance out of pocket. There is indeed a higher loading charge for this insurance—incidentally this higher loading charge is as a result of supplemental being individual policies as opposed to group insurance. It is marketed for individuals. Checks are collected from individuals. Everything is handled very much more expensively than in a group account. Nevertheless, the majority of elderly buy supplemental insurance, again indicating the way they shop and think about health care.

It seems to me we know enough from those experiences to have some real concerns about how wisely the elderly would exercise their choice with vouchers—especially when you consider that if you put \$2,500 in the hands of every elderly person in the country, you are saying to insurers, "Everyone you enroll is worth \$2,500 to you. That is the premium. Now if you happen to enroll one who doesn't use any services, that is \$2,500 free and clear. If you enroll one who uses them a lot, you could really run up some losses." It seems to me if you pit the collective skill of insurers, who want to enroll the good risks against the elderly who are trying to make the choices, it doesn't leave me really optimistic.

Let me offer one last thought on this business of supplemental insurance. With all deference to my friends who are economists, I sometimes think economists can stand issues on their heads better than anyone else. The idea that medicare is subsidizing supplemental has a kernel of truth in it, but the notion that that subsidy is anywhere near the amount that has been talked about just defies imagination. The paper included a line that said "Assuming that medicare supplemental purchasers are like those who do not purchase supplemental then," and it goes on. Well, in fact, supplemental coverage is purchased by higher income elderly, better educated elderly, and mostly suburban elderly. It is not purchased by lower income people.

It is also purchased by people who are afraid of risks, who have some experience of illness in their family. These are the folks who buy, and they run up big medicare bills, and they would run them up whether they had supplemental or not. Maybe they run them up a little bit higher and sooner because the deductibles and coinsurance are filled in, but to think there is a huge subsidy going to the medigap insurer is silly. The real problem is that medicare isn't offering the medicare population what they want, which is first-dollar coverage, and they are going anywhere they can to get it.

Mr. GINSBURG. I think we are running a little late. I would like to give the authors of the voucher paper, one of the authors, a chance for a final statement, Barry Friedman.

Mr. FRIEDMAN. Two paragraphs after the quotation that Stan Jones gave, we cited a study that looks at differential utilization and cost for people with medigap and without, controlling for their personal characteristics, and there still is under those conditions quite a lot more utilization, and it can be related to the better insurance coverage, to the point that you can buy a dollar of medigap benefits for a net loading charge of something under 3 percent, which is a pretty good deal.

Second, since I am talking about Mr. Jones, on the point about separating HMO's from vouchers, that is really a question of what kinds of plans are you going to approve in a voucher system, and how much are you going to set rigid criteria in advance of what are the ideas that do have plausible cost incentives, and that should be allowed to be tried in a voucher system. I don't think anyone—well, at least we don't have in view that you would open up a regime where an individual would take a \$2,500 check and go around to anybody who is willing to take his money for a plan. This would be a managed system with minimum criteria, and lots of plausible cost incentives to get into the ballgame.

If it turns out over time that a full coverage plan with free choice of provider, and no utilization review is very expensive, I wouldn't be surprised. It is an economic nonsense proposition, and the real alternatives are going to come down to do you want a plan with coinsurance or a plan with utilization controls or a plan with restricted providers. That may be the real frontier, but let me add that the goal is not just price competition. The goal in vouchers is we should be thinking about benefit competition, about drugs, eye-glasses, or long-term care, things that would be very hard for the

Government to enact for everyone and something that a lot of people might be willing to pay for.

They can get better terms under a managed voucher system than they can shopping around as an individual. I think that is important.

I think more and more people are getting more choice now in their working years. It is going to be very strange to tell them when they retire they don't have any choice.

Thank you.

Mr. GINSBURG. I would like to thank the authors and lead commentators and the panelists for the excellent job they have done in the session.

[Applause.]

Mr. GINSBURG. We will reconvene at 2 o'clock for the next panel on provider reimbursements.

REIMBURSEMENT

PANEL:

GLENN MARKUS, Specialist in Social Legislation, Congressional Research Service, Library of Congress, Washington, D.C.
BRUCE C. VLADIK, President, United Hospital Fund of New York
JUDITH LAVE, Ph. D., Professor of Health Economics, Graduate School of Public Health, University of Pittsburgh
JACK HADLEY, Ph. D., Senior Research Associate, Health Policy Center, The Urban Institute, Washington, D.C.
PETER D. FOX, Vice President, Lewin & Associates, Inc., Washington, D.C.
HAROLD COHEN, Ph. D., Executive Director, Health Services Cost Review Commission, Baltimore, Md.
JAY B. CONSTANTINE, Consultant, Health Policy and Programs, Washington, D.C.
ROBERT DERZON, Vice President, Lewin & Associates, Inc., Washington, D.C.; Former Administrator, Health Care Financing Administration
WILLIAM FLAHERTY, President and Chief Executive Officer, Blue Cross and Blue Shield of Florida
BEN R. LAWTON, M.D., Department of Thoracic and Cardiovascular Surgery, Marshfield Clinic, Marshfield, Wis.
JACK MEYER, Ph. D., Resident Fellow, Director of Health Policy Studies, American Enterprise Institute, Washington, D.C.
WENDELL PRIMUS, Ph. D., Economist, Professional Staff, Committee on Ways and Means, U.S. House of Representatives
MICHAEL ZIMMERMAN, Associate Director, Human Resources Division, U.S. General Accounting Office

Mr. MARKUS. My name is Glenn Markus, and I am with the Congressional Research Service of the Library of Congress. In this morning's session, we had an early taste of some of the suggestions, comments and proposals that relate to increasing the costs of the medicare program to beneficiaries, and tomorrow you will have an opportunity to discuss some of the proposals for increasing the cost of the program to the taxpayers.

This afternoon's session, however, focuses on the amounts that should be or ought to be paid to institutional providers of services and to practitioners.

The discussions about this topic under the medicare program are not new. Similar debates during the 1960's and 1970's, like those of this morning, tend to be couched in a variety of political and analytical idioms, but after many of the euphemisms are cleared away and some of the rhetoric has been settled, many of the core issues discussed deal with the basic compensation questions.

Herman and Anne Somers, in their 1967 review of the then-looming medicare problem, said it especially well:

The method and the amount of payment to providers will determine far more than the cost of the medicare program. They will significantly influence standards of payment for all public hospitalization programs, as well as those of Blue Cross and other third party payors.

They will also influence the price paid by individual purchasers. Moreover, since health care is not a fixed identifiable commodity, the character and the quantity of the service is likely to be affected by the payment pattern.

In short, the method of payment is not just a neutral financing mechanism to pay the bills. For good or for ill, it inescapably affects costs and quality and the patterns of service. There is no doubt that reimbursement policy, therefore, remains one of the major gut issues in the question of the future about the Medicare program.

In this regard, we have two panels this afternoon who will review and discuss the reimbursement papers that are described in your committee print.

First, we will talk about hospital reimbursement under Medicare. Our lead commentator, Bruce Vladeck of the United Hospital Fund of New York, will comment on the paper authored by Judy Lave of the University of Pittsburgh.

Thereafter, we will ask Jack Hadley of the Urban Institute to focus on the paper dealing with physician reimbursement under Medicare authored by Peter Fox of Lewin Associates.

Bruce.

Mr. VLADECK. It is a great pleasure to be here and to have the opportunity to comment on so excellent and thoughtful a paper. My first comment is to urge you all to read it.

Let me take on the task, as briefly as I can, of trying to do justice to Dr. Lave's paper.

The first point, and it is really quite critical, is that we are, after all, just starting prospective payment under Medicare. It is a very complex and very significant change, and it might well be prudent to take some time to see what is going to happen before we begin exploring alternatives to the system that has just been put in place.

The other issue that emerges in the course of that introductory statement is that over the next 3 or 4 years, the savings relative to current services levels anticipated from the new prospective payment system are on the order of \$68 billion. As we have been discussing, that still leaves the trust fund in a negative position before the end of the decade, but that is still a significant amount of savings, and I think implicit in Dr. Lave's discussion is the question of how much more savings can be achieved, at least in the relatively short run.

Dr. Lave then looks at a number of options being discussed for changes in the current system. The first one, I think in terms of significance, as well as in chronology, is the question of movement toward uniform national rates.

As she points out quite correctly, hospital care is locally produced and locally consumed.

There are very large regional variations in cost within DRGs, even after one controls for wage differences, urban versus rural locational differences and differences in extent of teaching activities.

There is also some evidence from States with ratesetting programs that high-cost hospitals tend to persist as high-cost hospitals even under controlled reimbursement.

More to the point, prospective payment saves money primarily through limiting the rate of increase in hospital prices rather than through reallocating the total dollars in the system among hospitals. Nor is there any particular rationale for reallocating Medicare dollars from hospitals in high-cost regions to low-cost regions, as uniform national rates would do.

Dr. Lave calls, at a minimum, for slowing down the implementation of national uniform rates until we have better data about cost variations in nonwage inputs and other sources of cost variation, and at a maximum raises questions about whether we should go to a national rate at all.

The second option Dr. Lave looks at relates to the adjustment for indirect teaching costs. I will not go into the details, but there are reasons to believe that the 5.79-percent factor that is incorporated in the current methodology by a doubling really ought to be 9 percent undoubled, as a more accurate reflection of the true incremental contribution of indirect costs for medical education activities. There is also a question as to whether we want to continue to encourage expensive teaching institutions to treat relatively routine cases; that is to say, whether we want to apply the teaching adjustment to all kinds of cases or only to those that need to be in tertiary institutions.

Finally, relative to teaching costs, Dr. Lave recognizes that some of the willingness to incorporate them in prospective payment results from an implicit recognition of the large role that teaching institutions serve in providing uncompensated care to people who lack the means or insurance to pay for it, and suggests that perhaps we want to make subsidization for uncompensated care more explicit in the process of any reduction in the explicit subsidy for medical education activities.

As a third option, Dr. Lave suggests that we might want to develop low length-of-stay outliers to change the incentives concerning things that ought to be done on an outpatient basis for which payment on a DRG system encourages admissions.

Dr. Lave addresses the importance of getting some kind of handle on technology and expresses some hope that the Prospective Payment Assessment Commission will adopt firm guidelines about effectiveness and efficacy before new technologies are recognized in adjustments to the rates. Dr. Lave also raises the option of further limiting the rate of increase in per case costs under medicare by a formula stricter than the market basket plus one formula that is now in current law, and that many expect will be continued even after it changes from a statutory to administrative decision. She points out quite correctly, that in recent years the hospital market basket has increased at a faster rate than inflation in the economy as a whole. Thus, market basket plus one means that hospital prices are going to continue to grow faster than prices in the economy in general, and of course faster, therefore, than revenues for the hospital insurance trust fund, as long as we have the same sort of tax base as we have now.

On the other hand, Dr. Lave points out that market basket plus one is awfully stringent by historical standards. She also raises concerns about the extent to which we can afford, over a period of time, to have too great a divergence in the rates medicare pays hospitals from what the private sector pays hospitals. Implicit there is a concern about access problems for medicare beneficiaries. Therefore, she suggests that any changes in the general rate-of-increase formula need to be partially contingent on the private sector response to changes in medicare hospital payment.

She examines the question of whether we should further encourage the development of waived State systems, and concludes that the Federal Government should probably remain relatively neutral on that. She also adopts what she says is a wait-and-see attitude relative to all-payors regulation at the Federal level.

Dr. Lave then goes on to explore some of the predicted effects that prospective payment is likely to have. She believes there will be a reduction in real services per discharge. This will lead to charges that quality of care is being adversely affected. Whether or not care is being adversely affected is much harder to tell, but the charges will certainly be made. At a minimum, it is therefore particularly important that mechanisms like PRO's are in place and functioning effectively, so we know what is happening, or begin to get some sense of what is happening, to quality of care.

Length of stay will fall. That will put more pressure on nursing homes, home health agencies, and other places to which medicare patients go after hospitalizations. It will mean they are seeing sicker patients and raise questions about the costs of those services and how they are being reimbursed.

Admissions and readmissions will probably increase to the extent that unbundling is still legal by substituting part B services such as preadmission testing, for part A services. There will be a one-time legitimate recoding of many cases to maximum reimbursement. This is a one-time phenomenon, but it could throw off the cost savings in the early years. Dr. Lave is skeptical as to whether there will be much skimming within DRG's, with hospitals trying to find the cheaper or less-intense cases. She is fearful that services like nutrition counseling or health education may be dropped by hospitals under pressure from prospective payment, and anticipates continued restructuring of the hospital industry in terms of the organization and ownership of hospitals.

We do not know, Dr. Lave suggests, how great the degree of any of these effects will be or what the overall outcome will be. If many of these things happen to the worst possible extent that can be reasonably imagined, then they will be insoluble within the existing structure of medicare. If these effects only occur to a mild degree, there may be milder sorts of interventions that can address them.

Nonetheless, the basic structural problem which is not currently addressed by the prospective payment system is that it is a pricing system in what remains an open-ended fee-for-service financing system, in an environment of increased interprovider substitutability and increased provider discretion as to the appropriate forms of diagnosis and treatment. Dr. Lave quite correctly points out that this problem exists regardless of the specific form of a prospective payment system.

Nonetheless, it needs to be addressed in one way or another if we are going to satisfactorily organize payment under medicare. Therefore, in addition to a sort of in-passing recommendation that we should probably merge parts A and B and get away from some of the perverse incentives relative to substitution among types of services, Dr. Lave suggests only two long-range options for dealing with the cost of institutional and other services for medicare.

One is increased cost sharing, and the other is greater emphasis on capitation and managed care. Dr. Lave expresses skepticism about the political feasibility of substantially increased cost sharing, but she is more optimistic about capitation and managed care.

In conclusion, Dr. Lave argues that prospective payment, even if it works, is a pricing policy; that we need to manage the system and prospective payment does not do it. And we probably need to find mechanisms for management.

It is also fair to point out, in concluding this very fast tour, that Dr. Lave does raise, by way of conclusion, substantial open issues in need of being addressed. These are uncompensated care and the financial problems of institutions that serve people without means and without insurance, and the problem of the subsidization of teaching activities.

I hope that, while overly fast, that has been a fair summary. Judy will have a chance to respond, but she really laid out the essential issues very well.

I would like to comment on my own, and I have divided my comments into three categories. First, what I would call technical; second, a sort of intermediate category; and, third, what I might call conceptual.

On the technical issues, I couldn't agree more that there is an inherent madness in the notion of a uniform national rate. There is no savings to be achieved from medicare to moving to a uniform national rate. For every hospital that is murdered in the process, another hospital receives an unmerited windfall. There are reasons to believe you ought to have uniform national rates as a piece of every hospital's rate calculation as a standard of efficient production of services. But Dr. Lave is quite correct; the savings come from controlling the rate of increase. They do not come from the movement toward a uniform national rate.

We don't have uniform national anything else hardly any more. I don't see why we need it for medicare hospital DRG's.

The second point where I would supplement Dr. Lave on a technical level, involves the concerns about unnecessary admissions, increases in admissions, low end outliers, and all those sorts of things. They are probably best addressed by the introduction of some sort of volume variability factor, at the individual hospital level, into medicare prospective payment. The experience in New Jersey shows very clearly that if you pay on a per case basis, the difference between average and marginal costs at the margin provides enormous windfalls to hospitals with relatively small increases in volume, while at the same time unfairly penalizing institutions with relatively small decreases in volume.

Further, it seems to me that if we are concerned about the total fiscal impact of paying by the case, because providers still have control over the volume of services for which they are being paid, there are, from a technical point of view, relatively easy adjustments to make to remove the financial incentive to increased admissions. That ought to be done right away.

My third technical point involves the control of technology. It seems to me—and here again, the New Jersey experience is quite constructive—that if you take the capital costs associated with

equipment and put them in the DRG rates, you are about half of the way home toward requiring individual institutions to make rational cost-effectiveness determinations about whether or not a new technology ought to be purchased. If the purchase of a new technology permits you to treat someone for a total cost of care that is no greater or even less than you go out and buy it. If it increases the cost of care, you think twice.

The OTA report on DRG's and their likely effects on technology has a two-by-three grid that expresses these issues very well. The Prospective Payment Assessment Commission will have a lot to do, and they should really only be worrying about technologies that increase costs while purportedly increasing the quality of services. For those that are cost reducing, we ought to let the system take care of itself by building technology costs into DRG rates.

In a footnote, which in the next version will not be a footnote, Dr. Lave says we have got to do something about capital. I don't share her views that a percentage add-on capital allowance added to the rates is desirable, even though she would permit States to pool those amounts. But that is really the topic of another discussion.

I think the emphasis on the importance of appropriate professional review and quality assessment under a DRG-based payment system is quite correct and quite appropriate. I am not certain there is any logical reason why the need should be any greater now than in the past. DRG-based payment systems permit you to focus better on some of the critical issues at stake when you do quality assurance. That is a strength. We have always needed PRO's and have not done nearly as well as we should have, but we should re-focus attention.

Finally, perhaps on the technical level, or perhaps on the intermediate level, I am not entirely convinced by the discussion on the rate of increase. Obviously, the great invention at the Federal level relative to the prospective payment system is the notion of budget neutrality, the concept that you can essentially set one number each year, if you have control of volume, and thereby establish your total part A inpatient liability for the year.

It is true that market basket plus 1 is more stringent than anyone has really ever done in the past except for 2 or 3 years in New York State. It is also true, however, that the original CBO study this past winter that first brought the issue of the impending deficit of the trust fund to everyone's attention, concluded that, if you set price increases at market basket minus 1.6 percent, the trust fund stays solvent indefinitely, but that that might be unacceptably stringent by most of our existing standards.

I would point out, however, that market basket minus 1½ is what the Massachusetts Legislature thought it did when it enacted Senate bill 372, and in the Massachusetts context that was not viewed as an unrealistic target. I don't see why we need to be locked into market basket plus one. It would solve most of our problems if we could see some real increases in net productivity in the hospital sector.

On what I would call the intermediate level, I personally feel obviously, that we ought to be doing more to encourage State all-

payor systems. I will make one specific point in that regard, and that is, that in the short run, we have no other available satisfactory mechanism that is politically feasible to address the issues of uncompensated care in financially distressed hospitals. The all-payor systems in four States where they have been around for more than a month or two have done that exceedingly well.

The issue of hospitals going broke merely because they serve poor people is a very real problem. That must be a major priority issue as we talk about controlling health care costs. Only State all-payor systems have established a technically feasible method for doing something about it.

On the issue of teaching costs, maybe because I am not an economist, putting some subsidies in the rates does not seem to me to be such a bad idea. I would raise a caution though, and that is relative to Dr. Lave's issue of not paying a teaching adjustment for routine cases. As she herself points out, we have increasing reason to believe that we systematically underprice very fancy tertiary services and systematically overprice routine services. This is true under all applications of medicare accounting principles, and indeed under just about every hospital pricing system we have, primarily as a function of the way we do cost allocation, especially for nursing.

If it is true that we underprice expensive cases and overprice easy cases, and we then remove the teaching adjustments from the routine cases, then the subsidy that has been available there to subsidize the expensive cases in teaching institutions is removed, and the problem arising from the disproportionate share of intense cases in teaching hospitals is made worse, not better.

Finally, at the level of intermediate issues, I personally perceive a growing consensus in a number of places for an integration of parts A and B. I don't see any good reasons against it, and I quite agree with Dr. Lave that, it is something toward which we ought to move. But I will go a step further, relative to some of her other points.

I am familiar with all of the statements emanating from this city that medicare is not a long-term care program. That appears to be a major philosophical commitment, but also an error of fact. Medicare is paying billions of dollars a year, not only in terms of SNF and home health care, but for patients awaiting placement, doctors' fees, for long-term care clients, and so forth.

If we are ever going to solve the problems of long-term care financing—about which, you all may have noticed, people make reference and then run away as quickly as they can—we have to integrate medicare and medicare long-term care financing. While we are merging A and B, we might as well merge "care" and "paid."

Prospective payment only deals with prices, as Dr. Lave appropriately insists. Unless the rate of inpatient price increases is held below market basket, you will not save enough money to keep the trust fund solvent, ignoring for the moment the revenue side.

In my simple-minded understanding of the issue, total cost equals price times volume. We are now controlling price. How are we going to get at volume?

Dr. Lave suggests two ways, cost sharing and capitation. She says cost sharing, the evidence seems to be, controls volume but is not politically feasible. I would add that it is not politically feasible precisely because it is most punitive to those who most need care, something at which many of us are naturally repelled.

Capitation does control volume and, therefore, capitation is everyone's favored approach to a lot of these problems. I am sympathetic to the notion. But we have a real problem. Looking at the HMO experience, it appears that you can offer all sorts of capitation arrangements but it is hard to get people to enroll in them. Depending on the market you are in and the experience in that market, it is extremely difficult to get people who otherwise have good coverage to enroll.

I am involved, to a peripheral degree, in the current issue of medicaid reform in the State of New York, where the issue is this: We could save the medicaid program in the State a fortune and provide better care if we could get recipients all enrolled in capitated plans. But they don't want to be enrolled in those plans. We have seen the same sort of problem in Massachusetts, and I would just suggest that the political opposition one encounters relative to locking in the poor in medicaid capitation is nothing compared to what you would see relative to the politically enfranchized elderly.

Dr. Lave is relatively optimistic about managed systems. The one other thing we have learned from the HMO experience in the last 10 years is that it is not easy to manage a prepaid health care system in a way that remains solvent and gives good quality care. Whether or not it is doable is still just a hypothesis, unless you are talking about a very small number of relatively old group model plans. Therefore, it seems to me, in addition to prospective payment, we are going to have to take a number of different sorts of steps to get at the issues of volume.

Obviously, we will have to continue to encourage capitation, but I am not optimistic that we are going to enroll that large a share of medicare beneficiaries in capitated plans unless we really skew the financial incentives in ways that significantly reduce the current value of medicare benefits.

I think, therefore, that we also need to take seriously for once, for the first time perhaps, the notion of utilization review. If we are going to gear up all these PRO's, we might as well give them that to do as well.

Further, there are some promising beginnings in some regions of the country in treating hospital rate setting in terms of total budget caps or revenue caps rather than in terms of per unit prices. You can talk about doing that on a statewide or regional basis and let regional corporations make price/volume tradeoffs.

We are going to have to change incentives in physician reimbursement and perhaps also we are going to have to play around with what might be called mixed forms of financing which mix some of the advantages of capitation or prepayment with some of the advantages of not requiring people to enroll in plans. I am thinking now in terms of the way IPA's pay their physicians. You pay a part of the fee now and a part at the end of the year if the utilization experience is favorable. There may be some lessons there for larger insurers, public and private.

I have no systematic answer on these issues other than I don't think there is a systematic answer.

In conclusion, first, we are just getting started with medicare prospective payment. It is too soon to be drawing conclusions. Dr. Lave has some suggestions. I have not been shy about making them either, but the evidence is not in and we ought to be prudent about waiting for some of it.

I was very much struck by the comment this morning that nobody has been talking at all about what all of these things mean in terms of the quality of services to patients.

One of the things we ought to wait for to see what actually happens involves the aspirations of the people who were involved in the development of DRG-based systems, that when you merge prospective payment with the DRG as a unit of payment, you provide a mechanism through which hospitals and physicians would seriously look at patterns of care rendered in hospitals and perhaps do something to improve them.

Thank you.

Mr. MARKUS. Thank you very much, Bruce.

Dr. Lave.

Ms. LAVE. Thank you, Bruce.

It seems to me that there is probably more agreement between these two panelists than some of the ones we have heard earlier so I will comment on a few and stress a few points and make a couple of additional comments.

I will reiterate my concern about national uniform rates. My problem with national uniform rates is that if they are implemented in 3 years, the speed mandated under the current law, that is such a strong reduction in reimbursements to hospitals in the Northeast and the east north central that it will kill prospective payment. For example, on average, 62 percent of the hospitals in the east north central region would receive an average 13-percent reduction in their payments.

That is about three times tighter than the Massachusetts system. I personally believe that the existence of a national rate may kill prospective payment because of the political uproar it will cause in certain regions of the country. Thus we won't really have a chance to get it underway.

The second point I would like to comment on is the problem of volume variability. Everybody is very concerned about the likely increase in admissions rates under prospective payment. The incentives are to increase those admissions. However, the professional review organizations have been specifically charged with monitoring admissions and the Department of HHS has been asked to study the need for preadmission review.

I am somewhat concerned about putting a volume adjustment in the rates for the medicare population only. Every particular subgroup of payors has a very high degree of variability in their number of admissions from year to year. You may want to have a volume adjustment on the total population. It is not clear to me that it makes much sense when the mix of populations is jumping up and down.

The medicare population may be increasing while other populations are decreasing. My preference would be to have the PRO's examine the issue.

You recommend that the allowable rate of increase be lowered. It is true that Massachusetts currently has market basket minus one while the current medicare prospective payment system is market basket plus one, nationwide. However, for some regions of the country it is market basket minus three and in other parts it is market basket plus three.

It is my judgment that we cannot decrease the overall rate of increase within the confines of a national-based system. If you moved to a more regional-based system, you could in fact lower the rate of increase beyond the market basket plus one.

Mr. Vladeck has pointed out we ought to be putting more encouragement into all-payor systems. I am neutral on this. A month ago I attended another conference where everybody argued that we had to get rid of the all-payor systems. There I was neutral again. It seems to me that I am always on the wrong side, or perhaps the right side on these issues.

Under the current system, there will be a lot of pressure for the development of all-payor systems. In particular, the hospitals themselves are going to begin to apply pressure because under the current medicare system, individual hospitals may receive wide windfall gains or losses. It is not clear that either communities or hospitals would choose to allocate a given amount of medicare dollars according to this outcome. Thus, there is going to be some pressure from hospitals, in addition to the pressure that we have already seen from the commercial insurance companies, to move toward all-payor systems—a system in which hospitals would have more control about their individual fates.

I argue in the paper that the Federal Government ought not to stop that from happening and it ought to allow a certain degree of variability in the approaches used by the States. It ought not require that all States move toward a DRG-based system. There may be more agreement here between Vladeck and me than is suggested by his remarks.

We seem to have a tendency to still think of the health care system as being made up of hospitals and physicians. Well, that is changing very dramatically. We now have great variety in both setting and provider. There used to be things done in hospitals and things done in doctors' offices and now we are having a whole spectrum of things that can be done and each one of the new providers are coming to Blue Cross, et cetera, and say "Pay us. We can do it cheaper," and they probably can do some things cheaper. But one of the lessons that we have learned is that these providers act both as substitutes and complements for each other, and my concern is that under a system where medicare makes its decision service by service, provider by provider and technology by technology, and where there is no capping of the system, that the end result of that is going to be a very regulated system.

We are going to have an awful lot of regulation at the Federal level, and this regulation will not be able to take regional differences into account.

As a longrun solution we are going to have to move to a more managed system.

I think that basically we have to move away from uniform rates and move to more regional rates—or we have to phase in to national uniform rates more gradually.

We do have to lower the teaching adjustment because there are in fact major gains going to some hospitals. I think that we can estimate the required teaching adjustment better. I also think the medicare program can and should begin to cover some of the costs of uncompensated care in the medicare rates. This would require a radical change in policy.

However, as all of the payors, both private and public, have tightened their reimbursement rates the problem of uncompensated care will become much more acute, we will have to worry about it. I have proposed a short-term suggestion but we will have to worry about a longer term solution.

Mr. MARKUS. Thank you very much, Dr. Lave.

In the interest of time, we better keep pressing on.

Jack Hadley from the Urban Institute will comment on the paper, "Physician Reimbursement Under Medicare: An Overview and a Proposal for Area-Wide Physician Incentives."

Mr. HADLEY. Dr. Fox begins his paper with a discussion of why physician reimbursement is an important issue and how medicare is currently paying physicians and some of the problems with that system. That is useful background, and I will summarize some of those points.

Why should reform of physician reimbursement under medicare be a high priority issue? First, spending for physicians' services accounted for 22.5 percent of medicare's budget in 1981, ranking behind only inpatient hospitals' two-thirds share. Second, medicare's spending for physicians' services has been growing faster than its spending for hospital care, 17.1 percent per year between 1977 and 1981 compared to 16.9 percent for hospitals. Third, physicians have an obvious and substantial bearing on the use of all medical services. To the extent that medicare's current physician reimbursement system does not encourage economical behavior, is too expensive and too inflationary, then reforming it should be a high priority.

What is medicare's current physician reimbursement system, and what are its problems? With few exceptions, medicare uses the "customary, prevailing, and reasonable; charge (CPR) method to determine how much it will pay for each and every service provided by a physician.¹ The amount determined by this process is called the reasonable charge, which is defined by statute as the lowest of the following three amounts: The individual physician's actual billed charge for the specific service provided; the amount that he or she customarily charges for that service, defined as the median of his or her actual charges in a prior time period; and the prevailing charge in the community, defined as the 75th percentile of customary charges within a given locality.

¹ Many medical and Blue Shield plans employ a similar method called UCR, usual, customary, and reasonable.

Customary and prevailing charges are updated each July using data for the preceding calendar year. Because of inflation in physician's charges generally, this time lag means that medicare-determined reasonable charges will be lower than the physician's current charges. However, basing reasonable charges on physicians' own charges and updating them annually made them both relatively generous and relatively inflationary.

Consequently, Congress included in the 1972 Social Security Amendments a provision to limit the growth in communitywide prevailing charges to a rate determined by an index which reflects national increases in wage rates and physicians' office costs. If both actual and customary charges increase more rapidly than the index, and there is some evidence that this has not been happening as rapidly as was initially thought,² the externally constrained prevailing charge will eventually become an area-specific fee schedule. A major criticism of this de facto fee schedule is that it would preserve whatever relative relationship happened to exist among prevailing charges for different services at the time that the prevailing charge became lower than the actual and customary charges for a service. Thus, to the extent that high technology and procedural services are overpaid and so-called cognitive services are underpaid, these distortions would be preserved.

Dr. Fox cites two other problems with medicare's method of determining how much it will pay. It is confusing both to physicians and to beneficiaries and it encourages physicians to provide unnecessary or marginally necessary services. There is little contention about the former but the latter is a claim which I'd like to examine more closely later.

Determining medicare's level of payment is only one, albeit probably the most important, part of the overall physician reimbursement system. The other two interrelated parts are physicians' billing options and beneficiaries' cost sharing. In deciding whom to bill, the physician may either accept or reject assignment of each medicare claim on a claim-by-claim basis. Accepting assignment means that he or she accepts the medicare-determined reasonable charge as payment in full and submits the bill to medicare, which pays the physician after subtracting the beneficiary's cost sharing. The physician then bills the patient for the cost sharing. If the physician rejects assignment, then the bill goes directly to the beneficiary who is responsible for paying the full amount charged. The beneficiary in turn submits the bill to medicare which reimburses 80 percent of the reasonable charge after the deductible has been satisfied. These beneficiaries may face additional cost sharing equal to the difference between the physician's actual charge and medicare's reasonable charge for that service.

Among the reforms so far proposed and debated to varying degrees are the explicit creation of a fee schedule, combining physicians' billings with hospital DRG's, or developing physician-specific DRG's parallel in concept though not in content to hospital DRG's. Proposals to alter the assignment mechanism have included requiring physicians to accept assignment on all bills or on large bills

² Personal communication from William Scanlon, the Urban Institute, November 1983.

only or forcing physicians to choose periodically between accepting assignment of all or none of their medicare claims.

Dr. Fox argues that none of these approaches are comprehensive, that is, includes nonphysician providers, none addresses what he calls the "underlying problem of the 'blank check' mentality associated with the incentives embodied in the fee-for-service system as it now operates," nor do any of them explicitly recognize physicians' key role in directing the use of nearly all medical services. In their place Dr. Fox proposes an areawide incentive system with the following key features.

Reasonable market areas would be designated.

Within each market area, targets for total medicare expenditures (parts A and B combined) would be established prospectively.

At the end of the year actual expenditures would be determined and the difference between targeted and actual expenditures would be calculated.

Physicians would be rewarded or penalized depending on whether actual expenditures were less or greater than the target.

All physicians treating medicare patients would be subject to the penalties and rewards.

The proposal is predicated on several key assumptions: Fee-for-service will continue to be the primary method of paying for physicians' services; by setting targets, medicare will be able to moderate potential pressure on the trust fund without either reducing benefits or raising additional revenues; and this will come about because the areawide incentives will induce physicians both to change their own practice patterns and to promote other providers to be more efficient.

This will occur, Dr. Fox argues, because the limit or target imposed on each area will force all providers to collectively and cooperatively develop methods to bring resource use under the limit. He emphasizes that there would be no Federal mandating of any particular organizational form and that every area would be free to choose what works best for it. The essential incentive system proposed is familiar—total expenditures need to be fixed, as in most HMO, IPA, or voucher plans. However, this strategy differs from existing HMO or voucher options in one very important respect—the target population would be all beneficiaries in the area, not volunteers who might enroll in HMO's or join voucher systems. Also, areawide incentives are not mutually exclusive with other cost-containment strategies, and may in fact reinforce them.

Although the areawide incentive approach is simple in concept, it would face numerous design issues. Dr. Fox discusses seven: one, the target level; two, the reward and penalty structure; three, the formula for distributing bonuses and penalties to individual physicians; four, the availability of data; five, the designation of geographic boundaries within which the targets are set; six, the problem of patient out-of-area coverage; and seven, the locus of administration within each area.

Since his paper is not a detailed legislative proposal, he only mentions options and possibilities for how the design issues would be handled, and I shall be even more brief.

THE TARGET LEVEL

Initially, targets might be set to reflect historical rates of increase in medicare expenditures, perhaps adjusted for changes in beneficiary characteristics, inflation, and/or the percentage increase in GNP. In hard fiscal times, for example, the target could be frozen. Targets could also be manipulated to reduce cross area variation in medicare expenditures per beneficiary.

THE REWARD/PENALTY STRUCTURE

Rewards and penalties could be symmetric or asymmetric, and may or may not include maximums. For example, the reward might be 20 percent of any budget surplus—the target exceeds actual expenditures—and the penalty 10 percent of a budget deficit, with specific dollar caps on each.

THE DISTRIBUTION FORMULA

Rewards and penalties could be distributed on a pro rata basis determined by the volume of medicare services provided, on a per physician basis; or on some other basis. In order to avoid having to collect penalties from physicians ex post, some portion of the target could be withheld for end-of-the-year settlement.

OBTAINING THE DATA

HCFA would have to speed up its claims processing system in order to compare actual to target expenditures. A system of preliminary estimates, interim settlements, and final adjustments would have to be worked out until the claims processing lag could be reduced to an acceptable level.

DESIGNATING GEOGRAPHIC AREAS

Dr. Fox notes that defining market areas can be difficult and is likely to become politicized if the setting of targets is to have any redistributive elements. He alludes to health system areas and PSRO areas, but does not explicitly propose that either be the market area for his proposal.

CROSS BOUNDARY FLOW

To the extent that people residing in one market area receive care from providers in another, there will be problems in both setting targets and allocating actual expenditures to each market area.

ADMINISTRATION

Dr. Fox suggests that the PRO is the most logical administrative agency. Another logical possibility is the medicare fiscal intermediary. Dr. Fox does not feel that this is a critical issue, however, since the incentives inherent in the target will exist regardless of who administers the program.

In concluding, Dr. Fox notes that the incentives created by the areawide target are collective or group incentives, not individual incentives. This raises the question of whether the individual phy-

sician will respond at all, especially since medicare is responsible for only about 17 percent of the average physician's gross revenues. One way to increase the target's impact is to expand it to include medicaid or even private payors. Even if the target is limited to medicare, Dr. Fox still believes that the group incentive can be transmitted to individual physicians—his evidence is that independent practice associations [IPA's] report fewer days of hospitalization per 1,000 enrollees than for people covered by traditional Blue Cross/Blue Shield plans. Finally, because very little is known about most of the implementation and administrative issues, he calls for large-scale demonstration projects to test his approach.

CRITIQUE

The system of areawide incentives outlined by Dr. Fox would be a dramatic departure from medicare's current methods of paying not only physicians but also all other providers. It is just shy of a fully budgeted medicare program because the targets which would be set are not binding. Actual expenditures will still be determined primarily by the interaction between prices and use rates for individual services. If the national aggregate target is exceeded, medicare may be able to take back some money it paid physicians; if not, then it would give physicians a bonus and thus spend more than it would have otherwise. By using financial penalties and rewards as incentives, this approach tries to get physicians to be the collective managers, not just the prescribers, of all services used by medicare beneficiaries.

My comments cover the design, implementation, and administration aspects of Dr. Fox's proposal. The first question I address is whether the system's inherent incentives are likely to push or lead physicians toward greater efficiency. Second, assuming that the incentives do make sense, how feasible are the system's implementation and administration?

Dr. Fox argues that the combination of areawide targets, rewards, and penalties will induce physicians to make the medical care system more efficient, thereby saving medicare money, but without reducing benefits, either in terms of quantity or quality. Furthermore, the Federal Government would not impose, require, or mandate any particular type of organization to force physicians to change their behavior. Rather, the best approaches would evolve as a consequence of the incentives inherent in the targets, rewards, and penalties.

As Dr. Fox points out, the key to making his approach work is translating the collective incentive to reduce spending into an individual incentive to which individual physicians will respond. He believes that the fear of penalty and the prospect of reward will induce physicians to band together, to act cooperatively to limit resource use, and to monitor and police each other so that all conform.

I believe that this is likely to occur only if the potential reward or penalty is large enough to offset whatever gains the physician might attain by going it alone. For the individual, gain would include not only financial benefit but also the freedom to practice medicine without interference from an outside group. Although

areawide incentives give the appearance of setting a limit and using financial incentives to change behavior, I fear that the basic structure is inconsistent with the theory and evidence of the behavior of individuals in groups.⁹ As long as rewards and penalties are distributed among all physicians without regard to their individual behavior, the individual physician will do better by ignoring the collective incentive. Furthermore, the larger the group, the weaker the collective incentives become.

Let me give some examples. Suppose all physicians ignore the collective incentive and as a result exceed the target. For simplicity, assume that they all provide about the same number of services to medicare and that the penalty is distributed equally among physicians. Does it make sense for any individual physician or subset of physicians to reduce their services to medicare, either by cutting back on their own billings or by admitting fewer patients to the hospital? If some physicians do, their actions will reduce the size of the penalty, but by an amount far less than their own foregone income, since the aggregate reduction in the penalty is shared by all physicians. Can a subset of private physicians force other physicians to change their behavior? As I understand current anti-trust laws, the answer is no.

Let's take the opposite case and suppose that actual expenditures turn out to be lower than the target. If physicians had in fact not changed their behavior at all, then this would mean that the target had been set too high and that physicians received a windfall bonus.

But let's assume that in fact some physicians are very civic minded and consciously try to limit the services used by their medicare patients, but without affecting quality or outcome. For example, imagine that the physicians on 18th and 19th Streets in the District of Columbia have a strong north-south orientation and believe in preserving the union. They form the Numbered Streets Independent Practice Association NSIPA to manage their behavior and in fact succeed in cutting medicare expenditures by 10 percent, say, by admitting their patients to the hospital less often.

The physicians on K Street, L Street, and the other alphabet streets are east-west confrontationists who will have nothing to do with Government targets and collective behavior. They treat their patients just as they always have, but purely by coincidence, happen to increase their medicare patients' services by just the target rate.

Location theory being what it is, there are equal numbers of physicians in NSIPA and the alphabet streets. As a result, the D.C. reasonable market area's total medicare spending was 5 percent below the target. Medicare saved money, so it's time to hand out the bonuses. Dr. Fox suggested that physicians get 20 percent of the savings. If this formula were adopted, medicare would keep 4 out of the 5 percent and the remaining 1 percent would be divided among the physicians.

⁹ P. Held and V. Reinhardt, editors, "Analysis of Economic Performance in Medical Group Practices," project report 79-05 (Princeton, N.J.: Mathematics Policy Research, July 1979); F. Sloan, "Effects of Incentives on Physician Performance," in J. Rafferty, editor, "Health Manpower and Productivity" (Lexington, Mass.: Lexington Books, 1974).

If an equal distribution rule is followed, the NSIPA physicians would collectively get one-half of 1 percent and the alphabet street physicians would get one-half of 1 percent. For the latter, of course, this is pure windfall, since they didn't do anything different. For the NSIPA physicians, the bonus is indeed a reward for civic behavior. But to get this reward, these physicians reduced their own billings, of which, on average 40 percent represents costs and 60 percent is net income. So if the 10-percent reduction in services used by their medicare patients included a 1-percent reduction in their personal billings, then on net, they come out slightly behind. Their net incomes fall by 0.6 percent because of their reduced billings, against a bonus of 0.5 percent. This does not count any of the costs or time required to set up and manage NSIPA. Based on this scenario, I would predict that many physicians would move from 19th Street to K Street.

Humor aside, I think the basic flaw in the design of the areawide incentive approach is that it lacks a mechanism for forcing individual physicians to follow the group incentives. In the absence of compulsion and as long as rewards and penalties are shared, then the individual physician will always do better by pursuing his/her personal gain. To the extent that this contributes to a deficit, then that physician's individual contribution to that deficit is spread among other physicians. Conversely, if others voluntarily curb spending, then they wind up sharing the reward with others, so that they don't reap the full benefit of their cost-conscious behavior.

Research has shown that monitoring, policing, and managing are key elements of any group's organization.⁴ If the group is small, say 10 or fewer physicians, then these functions can be carried out informally through peer pressure. But as group size increases much beyond this relatively small number, it is important to establish formal mechanisms for not only managing resources but also tying individual rewards and penalties to individual behavior.

Large groups can be managed. Kaiser and other large HMO's and IPA's have demonstrated this. In fairness to Dr. Fox, he recognizes the problem of imposing group incentives on individuals and cites some IPA's success as evidence that it can be done. But one of the alleged advantages of the areawide incentive plan outlined by Dr. Fox is precisely its weakness—the lack of any required organizational structure which would impose targets, rewards, and penalties on individual providers. No one has to join an IPA and the areawide incentives aren't strong enough to get them to join.

Turning to implementation and administration issues, Dr. Fox mentioned several. Two warrant some emphasis, however. First, people travel to obtain medical care. In fact, it may be that the sicker they are and the more complicated their cases, the more and the farther they are likely to travel in seeking advanced medical help. This reality makes me very skeptical about the possibility of defining "reasonable market areas" for medicare services.

Dr. Fox recognizes the cross-boundary flow problem, but surmises it to be small. On the contrary, evidence on people's travel patterns for ambulatory care suggests that between 10 and 50 percent of

⁴Held and Reinhardt; Sloan.

visits occur in counties other than the county of residence, depending on the size of the county of residence.⁶ For most institutionalized care, the proportion crossing county lines is likely to be even higher, especially for complex care given by teaching hospitals, which tend to be concentrated in large cities. In general, and very importantly, the reasonable market area's size increases as the nature of the service becomes more complex.

Against whose target would cross-area expenditures be charged? Whether done by area of residence or area of service, cross-boundary flow will make some medicare patients more desirable than others by virtue of where they live. For example, depending on the choice made, it could create strong incentives for physicians in suburban Maryland and Virginia to see their medicare patients in the District of Columbia, or, conversely, induce District physicians to set up medicare offices in Rosslyn, Crystal City, and Chevy Chase.

One obvious way to deal with cross-boundary flow is to make the market areas large, say an entire SMSA or large portions of States, perhaps coinciding with medicare's fiscal intermediaries' boundaries. But as the area gets larger, then so does the number of physicians. The greater the number of physicians, the weaker and more diffuse the collective incentive to reduce spending, and the greater the costs and difficulties of organizing physicians into managed groups. To give some numbers, the Washington, D.C., SMSA has 7,665 patient care physicians: the District of Columbia has 1,795, Montgomery County 2,245, and Fairfax County 913. The New York SMSA has over 80,000 physicians. The very largest IPA may have about 1,000 physicians, and most are much smaller.

Finally, who would, or could, administer this system? Dr. Fox suggests the professional review organization or the medicare fiscal intermediary. These suggestions seem to be based on the belief that it is a few outlier physicians who are overserving or overproviding care, that their excessiveness can be identified through billing patterns, and that disciplining those few physicians will solve much of the medicare expenditure problem without hurting or affecting very many beneficiaries. Recall, however, that the expenditure target for an area includes all medicare services, part A and part B. Thus, whoever, administers the system will have to develop some way of collecting claims, payment, and use information for all providers, not just physicians. Furthermore, if a physician organization is responsible for administration, how is it going to change the behavior of other providers? Physicians do indeed admit patients, order tests, and write prescriptions. But they don't pay hospitals, or home health agencies, or nursing homes. Nor do they manage these organizations. They don't negotiate labor contracts, or make purchasing agreements. Thus, other than simply limiting use, it's not all clear how physicians could get other providers to be more efficient.

CONCLUDING COMMENTS AND SOME OTHER ALTERNATIVES

Dr. Fox's goal in proposing the areawide incentives system was to reduce the increase in medicare spending without reducing

⁶J. Kleinman and D. Macuk, "Travel for Ambulatory Care," *Medical Care* (May 1983), p. 545.

either access or quality. The harsh truth which Congress will have to face up to is that it probably can't be done. As the current administration learned in trying to balance the budget, raise defense spending, and cut taxes, you can do any two, but not all three.

In shaping the laws which will govern the medicare program, it would be prudent to remember one of the key laws of economics: You get what you pay for; and its corollary: If you pay less, you get less. The areawide incentive system might possibly save medicare money, as long as the targets were not set too high. However, physicians would simply view the penalties as fee reductions and, in all likelihood, would cut back on quality and/or the number of medicare patients they would be willing to see, either by limiting the number of new medicare patients or by passing on the penalty to patients in the form of higher charges, which would scale back the amount of care they would seek.

Given that choices must be made, the first and probably hardest question Congress should deal with is how much medical care is it willing to pay for on behalf of the elderly. If there were no return on the public investment in medical care, then the question would be much easier to answer. It would be clear that too much is being spent. But my own and other research suggest that on average a 10-percent increase in the use of medical care brings with it a 1-1.5 percent decrease in mortality rates.⁶ Mortality rates for the elderly have been declining dramatically since medicare was enacted, to the point where life expectancy at age 65 has increased much faster for Americans than for 65-year-olds in Canada and several west European countries.⁷

I certainly do not know what the answer is to the question of how much to spend. But I do know that it's an answer which is likely to change over time, as the Nation's wealth changes, as people's attitudes change, as knowledge and technical capabilities change.

I would also assert that debating the issue in terms of how many billions of dollars medicare spends, the medical care sector's share of GNP, of HCFA's share of the Federal budget is not terribly illuminating. There is nothing that is intrinsically right about health care making up 8 or 9 percent of GNP, nor is there anything intrinsically wrong about 10 or 11 percent of GNP.

Returning to the topic of this paper, if fiscal pressures dictate that medicare spend less, as it appears they do, then how should medicare pay physicians in order to get the most for its money in terms of quantity and quality and to promote acceptable levels of access for medicare beneficiaries? Note that there are two goals here, efficiency, that is, getting the most for your money, and equity, insuring that everyone gets served on acceptable terms.

This brings up another law of economics—one which was good enough to win a Nobel Prize for its developer, and this obviously is simplification: If you have two policy objectives you need two policy

⁶ See J. Hadley, *More Medical Care, Better Health?* (Washington, D.C.: the Urban Institute Press, 1982) for a summary of this research.

⁷ D. Rogers, "The President's Statement," *The Robert Wood Johnson Foundation Annual Report 1982* (Princeton, N.J.: The Robert Wood Johnson Foundation, 1983), p. 12.

tools. In other words, a physician payment method alone cannot both promote efficiency and assure equity.

In terms of promoting efficiency, our economic system has developed an as yet unparalleled, highly decentralized method—the price system.

But isn't this just fee-for-service?

Absolutely.

But what about the blank-check mentality?

The problem with fee-for-service in medicine is not that physicians are paid for each and every service provided, but that insurers, both private and public, have imposed no discipline on fees. People confuse the method of payment with the method of determining fee levels. As many physicians who treat medicaid patients will attest, fee-for-service can be very stingy.

CPR and UCR, however, are indeed blank checks—because they are purely mechanistic methods of determining fee levels. Until recently, no insurer was willing to say, "The price is too high for this service, or this service isn't worth what's being charged." Rather, attempts to limit fees, like medicare's economic index, have been as mechanistic and unconscious as the fee determination process itself.

If medicare is going to have to make tough decisions about how to cut spending, then it should start evaluating the specific services that physicians provide by comparing what it pays to what it thinks the service is worth. Is \$30 for a 5-minute hospital visit too high? Then pay only \$15 or \$10. Do you want to encourage people to see doctors early? Then keep the fee for an initial office visit where it is. Are too many lab tests being done, perhaps because fees are way out of line with the costs of doing tests? Then pay less for lab tests. Are there other procedures and operations which were difficult, complex, and expensive 10 years ago, but are now routine and much less expensive? Then pay less for those procedures as well. There are two points: First, fees should reflect not only the cost of provision, but also the benefit or worth to the patient; second, costs and benefits change and need to be continually evaluated. Individuals probably can't make these evaluations very well, nor do they have much incentive to do so under the current system. Insurers, especially one as large as medicare, should and need to make these decisions. Formulas like CPR cannot to it.

Ideally, fees should be, in Mark Pauly's terms, fiscally neutral.^a This means that in deciding among alternative treatments for a patient, we want the physician's personal financial return to be the same, regardless of which treatment is chosen. We do not want there to be a conflict between physicians' financial interest and patients' medical and financial outcomes. We want the fee system to reinforce the physician's ethical imperative to do what is best for the patient.

Can such an ideal fee system be calculated or computed with existing data? Is this a simple technical problem which we can solve with our computers? Obviously, no. Just as the process of price determination in real markets is iterative and continuous, establishing

^a Mr. Pauly, *Doctors and Their Workahops* (Chicago: University of Chicago Press, 1980), pp. 57-63.

how much medicare is willing to pay will be an iterative, continuous process that will require monitoring, updating, and adjustment.

But one of the virtues of the fee-for-service system is that it provides much of the information needed to make these adjustments. How many services are being provided at each price? How does volume change as relative prices change? What services seem to have a big effect on people's ability to function; which seem to have little impact? As technology changes, as input prices fluctuate, as other factors change, the answers to these questions will change. But only by asking and trying to answer these questions can medicare, and indeed private insurers, impose the discipline on fees in the same way that informed consumers influence prices in conventional markets.

How would this information be transmitted, both to providers and patients? A mandatory fee schedule for physicians' services would be one way. But I believe that an indemnity schedule which is an exact reflection of a fee schedule might be better. Indemnity insurance, which pays the insured or the beneficiary a fixed amount for each and every service but does not limit physicians' fees, is by no means new. Nor is its recommendation as an alternative to CPR/UCR methods of fee determination new.⁹

Why is it better than a fee schedule? There are three primary reasons. First, it rewards medicare patients for seeking care from lower priced physicians. Second, it does not eliminate price competition among physicians in trying to attract medicare patients. In practice, the indemnity levels may be set so low that few physicians will charge fees below them. But at least the indemnity approach leaves this option open. Third, it leaves physicians free to charge fees consistent with changes in their practice costs, in market conditions, and in technology. A fourth factor, outside the realm of economics, is that it would create less political conflict with physicians than would a fee schedule.

An indemnity schedule is like a fee schedule in that the indemnity amounts would represent how much medicare is willing to pay for each and every service. Relative indemnity values, for, say, a followup hospital visit relative to an initial office visit, would represent medicare's assessment of the relative costs and benefits of the two kinds of services. Like a fee schedule, it would eliminate confusion over how much medicare will pay. Like a fee schedule, indemnity amounts could be varied to reflect variations in the cost of living, so that the real value of the indemnity would be the same across regions and community sizes. If access and quality fall to unacceptable levels, then the indemnity payments will have to increase. Conversely, no increase will be called for as long as access and quality remain acceptable.

Leaving physicians' charges free to fluctuate is critical to monitoring the access and quality levels that the indemnity schedule buys. The difference between the indemnity payments and physicians' average charges will be the barometer of how much access and quality beneficiaries are receiving for the medicare payments.

⁹ F. Gianfrancesco, "A Proposal for Improving the Efficiency of Medical Insurance," *Journal of Health Economics* 2 (1983), pp. 176-184; M. Pauly, "Indemnity Insurance for Health Care Efficiency," *Economic and Business Bulletin* (Fall 1971), pp. 53-59.

As the differences between charges and the indemnity rates grow, medicare beneficiaries will have increasing difficulty in finding physicians willing to treat them, will have longer waits for appointments and in the waiting room, and will become more concentrated in practices which are of lower quality or offer fewer amenities.

No system avoids the inevitable tradeoffs which must be made in choosing among expenditure levels, access, and quality. But indemnity payments imbedded in the free-for-service system offer the best chance of making these choices rationally and intelligently.

An indemnity system would be easy to administer. For one thing, intermediaries would no longer have to compute customary, prevailing, and reasonable charges every year for every physician, every service, and every claim. Physicians could be required or requested to make full disclosures to their patients of the indemnity amounts for the specific services they are planning to prescribe. Billing arrangements could be left up to the physician, as they are with most private insurance. Physicians who wish to attract patients will offer to bill medicare directly. If the bill exceeds the indemnity amount, then the physician would be paid the indemnity less the mandated cost sharing amount. He or she would then bill the patient for the difference. If the bill were less than the indemnity, then the patient would receive the difference, less any cost sharing. Other physicians may choose to bill the patient and let the patient collect the indemnity (less the cost sharing) from medicare. But these physicians may face higher collection uncertainty.

This brings me to the issue of assignment. Some people believe that mandating assignment will save beneficiaries money. That it will, but at the cost of lowering quality and access for those who are willing to pay for it. Mandating assignment may protect beneficiaries from increased charges, but it would not protect them from cuts in access or quality. It is also likely to lead to a trend toward medicaid-like practices which specialize in medicare beneficiaries.

As I noted earlier, the fee-for-service system alone cannot both promote efficiency and assure equity of access. Another policy tool is needed. If the purpose of the assignment option is to improve access for lower income beneficiaries who are not eligible for medicaid, then another policy keyed to beneficiaries' income would be better. The most obvious choice would be either income-related cost sharing or an income-related cap on out-of-pocket expenses.

Others at this conference are much more expert than I on the best way to structure cost sharing schemes. Thanks to the considerable amount of very good research on cost sharing, we should be in a good position to design and implement a workable income-related cost-sharing system that addresses the goal of equality of access much better than would mandatory assignment.

Subsidizing some people's cost sharing will obviously cost money, as the actuaries will no doubt attest. Just as obviously, raising that money will be a politically sensitive process. From a purely theoretical perspective, Federal general revenues would be the least distorting, most progressive revenue source. Another option to consider, which might contribute to better systemwide performance precisely because it would distort choices, is a tax on excessively generous private insurance plans, including possibly medicare sup-

plementary policies. To the extent that such a tax pushes people toward being more fiscally prudent in purchasing insurance, then medicare beneficiaries will generally benefit from the reduced pressure on physicians' charges and hospitals' costs that less generous private insurance would entail. Such a tax would probably be less progressive, however, than the Federal income tax.

The pending medicare trust fund crisis requires difficult decisions to be made. But crisis also brings opportunity—the opportunity to make substantial and hopefully beneficial changes in the structure of the medicare program. Whatever changes are made in the next year or two will probably be with us for many years to follow. I hope that the pressure for a shortrun fiscal fix will not overwhelm this opportunity.

Mr. MARKUS. I regret we have a time problem.

Peter.

Mr. Fox. Let me go back over some of the underlying assumptions behind the paper, because I think they are critical even if some of them are obvious. First, the fee-for-service system is here to stay. Yes, there will be voucher systems. A voucher approach for medicare was enacted in 1982, but we are going to have to deal with the fee-for-service system.

Second, as part of dealing with the fee-for-service system, to control expenditures, we must influence utilization, and that in turn entails addressing physician behavior, and for all physicians not a select few who are in capitated systems.

Furthermore, while volume can be influenced by changes in relative prices, I do not believe that one can begin to solve the issue purely through relative prices. Instead, I believe they can best be addressed through changes in financial incentives, rather than through regulatory approaches, although to be sure the two are not mutually exclusive.

Now the basic problem that I see with the medicare program at present is that we have incompletely addressed the cost containment problems. The DRG prospective payment system addresses what occurs within a hospital stay. It fixes a price for the amount that a hospital will receive once the patient is admitted. It does nothing, however, about admission rates. In fact, it may lead to increases, and it furthermore does nothing about care on an ambulatory basis, which is much harder to track, and we have seen in recent years a significant growth in a number of ambulatory procedures that are quite expensive when aggregated, although maybe not one at a time, that is, oscopy procedures, bronchoscopy, X-rays, labs, a couple of others.

The proposal advanced is indeed a dramatic departure, but it does draw on certain empirical evidence which I would lean on frankly a little bit more heavily than I would economic theory. First, IPA's. We have seen that physicians in IPA's in relatively large aggregations, although not to be sure in the aggregations I am proposing, do work. Not all of them. A couple have gone bankrupt, but by and large they have been effective in reducing the use of hospital services.

We have also seen effectiveness by the PSRO and hopefully the new PRO program. However, that effectiveness has been marginal. A lot of debate that has occurred, for example, relates to whether

on balance the PSRO program saved 1 percent or, instead, when you factored in administrative expenses, cost 1 percent. However, I think the prevailing evidence is that at the margin it did reduce utilization, economic incentives to the contrary perhaps.

The assumption that all physicians would ignore an areawide incentive approach, or that only a small proportion would follow them, would certainly lead Jack to conclude that the PRO program must have been a failure, since it didn't even have financial incentives. The proposal then is indeed to set a target, not a fixed expenditure, but to set a target and to have penalties or rewards that would not necessarily be super rewarding or super punitive, that would be based on what happened to total expenditures within an area.

It does entail establishing some new administrative structures, while I leave open the exact locus of administration, there are indeed some logical places to turn, as Jack mentioned, including the fiscal intermediaries and the PRO's, although in many cases the areas would have to be redefined.

Now, the assertion that you can't cut the budget without cutting quality or access would be true if we were at an optimal efficiency point, which seems to be central to Dr. Hadley's remarks. The idea that you get what you pay for, I also disagree with. I think we are paying far too much.

Also, the notion that increased expenditures result in decreased mortality, while valid, one still has to ask whether those achievements—and they are very consequential, I don't want to put them down—could have been achieved at lower price.

With regard to the comment that you can't promote equity and efficiency at the same time, the focus of the paper is on efficiency, not on equity. However, there are two features to the areawide incentives that I think are important.

First, the targets can be adjusted to alter the relative expenditures across geographic areas. I am not talking about total equalization. An analysis reveals that in 3 of 22 SMSA's, medicare expenditures adjusted for age, sex, and area wages were below \$700 in 1978. In Miami, they approached \$1,600. No wonder the HMO's in Miami are having, or are about to have a field day. It is a wonderful place for a HMO, so again I come back to the notion that one has to address the underlying incentives.

The proposal is to create the areawide incentives, and to see if physicians start to begin not only to discipline each other but also to take a look at some of the procedures that they are performing and some of the hospitalizations which they are ordering.

I think this is an example of the mixed or managed systems that Judy Lave and Bruce Vladeck suggested we ought to consider.

Mr. MARKUS. Thank you very much, Peter. You finished right on time.

With your permission, we will break now to return at 3:45.

[Brief recess.]

Mr. MARKUS. Would everybody take their seats, please.

I wonder if we might get started. Again, as in keeping with the arrangements for this morning's presentation of the discussion portion of the session, allow me first to introduce you to the panel discussants: on my far left, your right, is Jack Meyer from American

Enterprise Institute. Seated next to him is Ben Lawton, from the Marshfield Clinic. Next to him is Jay Constantine, consultant; and seated next to Jay is Harold Cohen from the State of Maryland Hospital Review Commission—your discussants.

And on my right, your left, Bob Derzon of Lewin & Associates, Bill Flaherty of Blue Cross of Florida; Wendell Primus from the Committee on Ways and Means; Michael Zimmerman from the General Accounting Office; and at the end is Congressman Henry A. Waxman from California, who is also joining us.

I hope the respondents will please feel free to answer in any way you feel appropriate some of the general questions I will raise for introduction to a topic, and also feel free to volunteer your views about areas that you believe ought to be raised or discussed in somewhat more detail.

One of the matters I would like to raise is the \$250 billion projected medicare deficit. We focused this morning somewhat on what options the Congress may have to consider in order to get a handle on the program, either by reducing spending or increasing revenues or by some combination of the two. The matter of increasing revenues or making other financing changes will be discussed by a panel tomorrow morning, so I would like to focus attention instead on what might be done in the area of reimbursement policies to address the deficit issue.

Dr. Lave I think properly emphasized that there may be a need for more time than is presently scheduled in law to enable the hospital sector to digest and to react to the structural changes that were made by Congress earlier this year, in adopting a prospective payments system for most of medicare's participating hospitals. Some of these changes, such as future adjustments in the DRG payment rates or in the teaching adjustment factor, perhaps ought to be examined on their merits, but for the moment, I don't see how such changes can be expected seriously to slow, much less halt, the steadily eroding financial situation of the program.

My first question for the panel, therefore, is, to what extent can or should the Congress look to further reimbursement policy changes as the means for bringing program expenditures more closely in line with program revenues? I would like to ask Bob Derzon if he might start that particular discussion.

Mr. DERZON. I think the fundamental problem, Glenn, is that this prospective payment program we now have is one which has serious failings. First is that it doesn't have certainty. We don't know how much this program is going to cost. Therefore, we don't know how much it is going to save. Now, critics would argue with that point of view, because they feel that one can predict what these expenditures are going to be, but my estimate is that we are going to see some increased use of services, admissions, and we are clearly going to see some upgrading of DRG's. In fact, it would not surprise me to see 20 to 25 percent upgrading of DRG's, and on a price-specific basis, that is going to mean more payouts in the short term, and therefore a more serious adjustment problem here, too, so I am deeply concerned about that.

The other side of the coin is that what we really want to have happen is not only do we want to spend less money on hospitals, but we want hospitals to spend less money themselves, because we

can't have a sick industry out there, a totally sick industry. As I view the hospital industry at the moment, I see a lot of troubles.

First of all, there is a substantial decline in many parts of the country in the rate of admissions, in patient days for nonmedicare patients, and that is obviously going to have a profound effect on the cost per case of medicare patients. We see no real diminution, although some slowdown in the rate of activity on the medicare side, but clearly we ought to be working toward a moderation in the use rates of the medicare system. I don't frankly feel that nearly enough has been done on the use side. It seems to me that there are plenty of opportunities to create savings.

I have a couple of comments I want to be sure get raised here. One is that Judy Lave has worried about the teaching hospitals, the subsidy of the teaching hospitals' bonus system. I am worried about it too, because I think it is necessary but the present formula allows an overpayment. It will come back to haunt the teaching hospitals. She tends to relate the special payment to possibly allowing for some compensation to those teaching hospitals for uncompensated care, on the theory that uncompensated care is heavily related to the teaching hospitals and their functions.

I would suggest that a careful look at that would show that some teaching hospitals carry very high burdens of uncompensated care and some really do not carry much at all, and so I think those two problems ought to be kept separate in any proposal making, and I want to get that on the record.

Second, I think that we are going to have to be prepared, if we want to control medicare costs and reduce those deficits, to not necessarily reversing gears on our hospital payments systems. I think we have obviously evolved into a system of per case reimbursements, a system I generally favor, but I don't like the price specific, high sensitivity of the DRG system, and I don't think it is going to affect hospital behavior the way many of its architects think it is going to affect them.

First of all, hospitals are going to scamper for all admissions, even those that are more complex in character. I don't think hospitals are going to abandon services easily. I think that hospitals are out there competing for cases, and the only way that a hospital can survive in this environment is to have a lot of admissions.

That is going to be the fundamental driving force, and largely because hospitals cannot relate easily the costs per admission to the DRG payment. They can relate their rates, their charges, but they cannot easily relate their costs because no hospital has a cost sensitive system of the type that most of the architects think is possible. Hospitals are faced with more limited Federal expenditures—a very critical issue. I think we are going to have to simplify the system and go back to something that looks much more like TEFRA with much more emphasis on the target rate increases.

I think in the short term we may want to limit the windfalls. There are going to be some huge windfalls in this system, and some form of excess profits tax may be in order, even on the not for profits, who will have, I think, windfalls, too. It seems to me it might not be a bad idea.

The last thing I would suggest is that we get into place just as quickly as possible—capital components in the DRG system. That

is another area of uncertainty. There are too many pending bond issues out there.

The problem in my view in the capital side is not one of lack of capital for the hospital industry, but way too much and too unsound a basis on which to make good investment decisions. You can't make good investment decisions when you have all this uncertainty, so I am for certainty as a primary policy goal right now.

Mr. MARKUS. Any reactions to Bob's points?

Mr. Constantine.

Mr. CONSTANTINE. I agree with Bob on the capital and totally on the teaching. I think we can get that out of the way pretty quickly. On the teaching thing, I think it ought to be out of the formula completely. Teaching costs should not be a burden upon the sick patient, they are a community responsibility, that is, the training of physicians ought to be part of the appropriations process. By including it in the DRG, you just simply put the burden on the sick patient, without regard to the validity of the types, the number, and the need for house staff. I feel very strongly about capital costs. I did a paper on it in 1981. If you want to start saving money in medicare and the system as a whole, you would start it seems to me, with repeal of the Reagan 1981 act provisions relating to accelerated depreciation and shortened lifespans, with respect to health care facilities. You need to prevent churning, the buying and selling of facilities by requiring that as of a date certain an asset could not be revalued beyond its original value as of that date for medicare depreciation purposes. You should include in that sale lease-back arrangements and so on.

That is a separate thing. That would probably save you about \$2 billion overall, at least a couple of billion applied to the health economy in general.

I also agree with the consultant who is quoted in Dr. Lave's paper as saying that the DRG system would collapse. I think it is an absolute disaster. There are a lot of specific things that are infinitely more manipulable than the cost based system, which it supplanted and which could have worked with proper classification and some reasonable caps provided—that we were dealing with people in good faith, that is patients were admitted appropriately to hospitals, were not overserved, and were discharged in timely fashion.

Now, obviously the hospitals and the system did not do that. They took advantage of the reimbursement and manipulated it. A lot of that excess was, by the way, built into the DRG base costs and GAO scratched the surface when it said 6 or 7 percent of the ancillaries were unnecessary.

Now, I don't know what makes people think that hospitals are going to behave more rationally with an infinitely more manipulable system as the DRG system is with skimming, dumping, admissions, readmissions, the exemption of the outpatient departments, the reallocation of costs to outpatient services, the maneuvering of patients to skilled nursing facilities, home health and so on.

Mr. MARKUS. Jack.

Mr. CONSTANTINE. I think it is an infinitely more manipulable system which will come back to haunt everyone.

Mr. MARKUS. Jack.

Mr. MEYER. Well, I think that there are two key factors that will determine where we go from here. The first is how the Government reacts to its recent initiatives, and the second is how the private sector reacts to the Government's initiatives. If the Federal Government views the Medicare prospective payment system as a step toward a voucher-type system that is more comprehensive and less complex, namely a system that expands on both prospective payment and the new plan for Medicare's reimbursement of HMO's, then I think the system will be useful. The current system is unwieldy, complicated, and ironically incomplete, as Peter Fox's paper and presentation very adequately pointed out. There are no incentives or requirements for physicians to reduce costs or adjust their behavior, nor are there provisions to prevent unnecessary increases in hospital admissions.

At the same time, the Government is doing much more than it ever did at what it does worst, namely trying to figure out the right price of everything. For about 5 years the steel industry has had a DRG system for restricting imports. It is called trigger prices. The Government tries to figure out the right price of every carbon steel plate and other steel imports resulting in a system that is too complex to be effective. If the Government uses this prospective payment system as a movement toward a more complete system like a voucher system, it could be healthy.

By the same token, if the private sector reacts as Judy Lave seemed to be suggesting, then the prospective payment system could have a favorable effect. If the private sector recognizes that DRG's are the Government's approach to being a prudent buyer, and if each payer then determines the best way for it to become a prudent buyer, the system may undergo changes favorable to all payers.

More and more frequently, however, I see the private sector calling for systemwide price controls under the euphemism of an all-payor system. If the private sector, particularly the business community, uses Medicare's prospective payment system as another excuse to call for an all-payor system, I think a useful initiative will be seriously impaired. I am concerned that the regulatory approach will jeopardize the access and quality that consumers want by placing unrealistic constraints on providers.

To avoid this unfavorable outcome, I encourage those in the private sector to stop whining for controls on the health care system. Instead, I hope they will use changes in the Medicare program as a catalyst for reforming their own payment system.

Mr. MARKUS. Thank you, Jack.

Harold.

Mr. COHEN. In response to your question, Glenn, over the last dozen years hospital costs per capita have gone up about 20 percent because of increases in admissions, about 30 percent because of inflation, and the things hospitals buy have gone up faster than inflation generally, and about 50 percent because of intensity.

Congress was correct in focusing on intensity to begin with, but I don't believe that that is the only thing that can be focused on. Those other two items do amount to 50 percent, and I think you can save money by looking at inflation in the general economy as

opposed to inflation in the market basket, and you can look at the admissions increase.

Mr. MARKUS. Wendell.

Mr. PRIMUS. I would like to make two comments. First, I agree with Judy Lave that perhaps the phase in to a national DRG rate ought to take place over a longer time period and some of those windfalls ought to be reduced.

Second, it might be appropriate to focus for just a little bit on the assumptions behind the \$250 billion deficit projection. That number assumes essentially a hospital reimbursement rate of market basket plus 4 percent, or market basket plus two and some substantial gaming on the admissions side.

I would also hasten to add that it is very difficult to predict exactly how large the deficit over the next 13 years will be. Over time, as the commission examines how the hospitals respond, they can recommend increases equal to market basket minus one, market basket plus one, or some other rate of increase. If you take market basket plus one for 13 years, then this \$250 billion deficit becomes \$95 billion, assuming no difference in the admissions pattern. The question is how much of this financing burden or currently estimated deficit ought to be borne by hospitals. In determining that rate of increase factor, the amount to be borne by hospitals will be determined to a large extent.

Ms. LAVE. I have a couple of comments, and I do sometimes disagree with my good friend, Bob Derzon. Even in Pittsburgh we observe some anticipatory reactions to the system. People are being laid off and beds are being shut down. In the Pittsburgh region we have very, very long lengths of stay, and the hospital administrators are very concerned about this. Whereas some are engaging in activity to increase admissions, as can only be expected, we also see some activity with respect to reorganizing hospital management information systems and to reducing their staff and closing their beds.

We must be aware that this system will lead to hospital closures and to decreased bed supply. That may be one of the good outcomes of the system, because we are overbedded. But for the people in Washington and at the policy level, it is going to be very politically difficult for them to deal with.

I think that you may have misinterpreted my position on uncompensated care. I do not believe that the teaching adjustment was included to pay for uncompensated care, and have argued that the teaching adjustment should be reduced. However, teaching institutions do provide more uncompensated care than nonteaching institutions, and thus the issue of including some adjustment to the rates was addressed in that section. The proposal, however, is to adjust the rates for all institutions.

The teaching adjustment as currently measured by medicare picks up a number of different things, all of which we do not understand. It measures both the indirect cost associated with teaching as well as the cost of treating more seriously ill patients. Until we know how to measure severity directly I don't see that we can avoid paying teaching hospitals somewhat higher reimbursement rates.

Mr. MARKUS. Bruce.

Mr. VLADECK. Let me make a quick comment in response to your question, and something Bob said and something Mr. Primus said. I couldn't agree more with Bob Derzon's comment that it is critical, for a variety of reasons, to decide on a maximum degree of certainty in the system, and give hospital managers a chance to manage under a set of defined constraints for more than 1 year at a time. I think that is important. And I think the notion that every year we are going to look at the deficit in the trust fund and decide how to set the inflation factor, depending on how the deficit looks, is precisely the sort of thing you don't want, it seems to me, in terms of establishing an environment of some degree of certainty.

But I think it is very clear that once we begin to get a handle on the issue of admissions—whether through volume variability, or just through experience, or through effective PRO's—the way we have set up the prospective payment system does create the opportunity to relatively straightforwardly say: here, on an assumption of a given set of admissions, is how much medicare is going to pay the following year for inpatient acute care. And I think as we look at the entire range of issues surrounding medicare, we should say 50 percent or 60 percent or x dollars of the savings we need relative to the deficit is going to come out of the hospitals.

We ought to make that a relatively explicit policy and stick to it from 1 year to the next. Then we can add to Peter's notion and say that, if volume goes up more than it should, the way you can keep on track is by reducing price.

Mr. MARKUS. Jay Constantine.

Mr. CONSTANTINE. I wanted to pick up Wendell's point about the market basket as one indicator of the kinds of problems the system now includes. That is, inflation is projected in the market basket, and that is built into the DRG. There is no provision for adjustment. So the guesstimate as to inflation is locked in. That is, the hospitals can get a windfall or be penalized as a result of that market basket inflation factor, instead of having a system where—and I know how to do that—that doesn't penalize or reward on the basis of inflation. The estimate can also be used as a means of fiscal policy. The Government or OMB can deliberately underestimate that inflation as a means of reducing hospital payments.

Related to the present DRG formula—and I have two quick interim solutions—not solutions, but just lifesavers. First, is the need for a moving average in the DRG. You can have hospitals which have unusual costs in 1 year but are stuck with the same DRG. That is, they may have a labor wage settlement which pays more in 1 year, say, 10 percent in the first year, and then 2 percent in the second and third years. Unless you have a moving average in there, that hospital is really screwed. That is one.

My other suggestion would be that for an interim period, hospitals continue to maintain their cost records and that they be given as an incentive 50 percent of the difference between their costs and the DRG. If they are over the DRG, they would get 50 percent of the difference between their costs. These approaches until these tremendous intensity problems—nursing differentials, all of those things—are worked out. There is a whole list of similar problems.

Mr. MARKUS. Bob, you had something?

Mr. DERZON. I would like to come back just to clarify a point. I think hospitals are changing certain kinds of behavior. They are laying off staff at some places, and they are doing it, I think, not in response to the medicare issues at all. I think they are doing it in response to what else is happening. And I don't think that the savings are going to be passed back to medicare. That is the problem.

In other words, medicare is going to be paying on a per price preestablished basis. And because I think hospitals are going to be trading up the secondary diagnoses and a whole lot of other things, there are going to be the short-term shots of additional payments that come out of the trust fund. So that, at the same time the hospitals may be cutting costs and discounting for preferred providers and for the private marketplace, medicare is not going to get its discounts at all, and it is going to be locked into a pricing pattern. I see the need for changes.

I would like to see some—and I don't have any very specific suggestions about this—but I would like to see some changes in the DRG system or in the prospective payment system that would allow certain hospitals in certain regions to merge their activities and their programs, if we can safely contemplate that we have excess capacity. What we really want to do is reduce system costs, and I never hear any discussion about any ways in which we can take and combine providers.

I know it is the opposite of Jack Meyer's ideas of competition, but what I see in some communities is enormous amounts of excess capacity and people striving to pay off their banks. When people talk about the difference between for-profit and not-for-profit now the distinction is so blurred because even the not-for-profits are paying off their bankers before they are paying off their patients.

So we have big problems out there. I would like to see some reimbursement stimulus that would drive toward reasonable consolidation in some places.

While I am on maybe more imaginative ideas about ways to pay for things, we haven't talked much about all-payor systems. The argument was made very strenuously in the previous session—and I think Bruce made it elegantly—that the real value in all-payor systems was you solve the problems of paying for the uncompensated poor. That may be reason enough to do things.

On the other hand, that may be a very much more expensive solution, if, in fact, all-payor systems drives up the total cost of care more than it would have been had we taxed ourselves in a different way to pay for the uncompensated care. I think that equation has to be put together.

But there is another reason why States should be thinking about all-payor systems, and when I think about all-payor systems I like to think about rural all-payor systems versus urban all-payor systems. We have many States with many rural institutions that need certainty and stability, if, in fact, we are going to have providers out there. The State of Maine has lost half its hospitals, practically, and there is a point at which we pay too big a price for failure of the hospital industry. I think that we move to all-payor systems in part to protect an industry that needs protection.

In rural States, there can be an argument made that in rural areas where no competition can ever be generated, that there is no

reason why we couldn't have all-payor rural systems, but maintain a non-all-payor requirement for major urban areas where competition could be stimulated.

Mr. MARKUS. Hal.

Mr. COHEN. I am a little concerned about references to taking things out of hospitals or making them pay for trying to save costs. AHA just came out with their 1982 hospital statistics. According to that, the nonregulated States had a percentage increase in costs per admission, per equivalent admission, of 16.3 percent, while the regulated States increased by 10.8 percent. Now someone may think that 5½ percent is taking something out of the hospitals, but I have difficulty thinking of any social program that would not drool over a 10.8-percent increase in the costs that they get to provide the services that they provide.

Another thing I would like to comment on is we have talked earlier about the combination of parts A and B, and medicare losing its monopsony. One of the concerns about the physician area has to do with whether they will accept universal assignment or not accept universal assignment. I do not see why as a purchaser medicare cannot use its monopsony power on the hospital side to require universal assignment of hospital-based physicians, for example. Why contract with a hospital that does not require universal assignment as a requirement for its giving a monopoly franchise to certain physicians. If medicare wants to achieve such universal assignment, they can do it. They can avoid the monopoly power on the doctor's side by using their power on the hospital side.

Mr. MARKUS. Let me see if I can move us to another topic which has been indirectly raised. That is that medicare, the largest single buyer of hospital care, is still only one of the purchasers of services. Judy Lave in her presentation rightly pointed out that the responses of the institutions will be very significantly influenced by what other purchasers of hospital care will do in dealing with this engineered pricing system that we call DRG's.

I would like to ask Bill Flaherty, as a third-party payor and as an intermediary under the program, to offer some suggestions about what he is doing in Florida in this regard.

Mr. FLAHERTY. Just an overview. The improvements we see are taking place almost solely in the arena of the competitive marketplace rather than in what I would call the gaming responses to the regulatory initiatives. The kinds of discounts or price cuts or fee cuts that are taking place, and the kinds of utilization management strategies that we see occurring are really occurring where there are organized systems of delivering either an IPA, HMO, closed panel, or some other combination of events.

In the case of Florida, a typical situation might be something like the following: A large hospital—47 percent of its revenues from medicare, 5 percent from medicaid, 27 percent from insurance, 8 percent private pay, and 13 percent indigent and bad debts, and I might add that one of the trends we see is low-income people driven out of the market for insurance, along with some billing practices that would suggest people do not expect cost sharing to occur, and so the charge structure is raised in anticipation of "bad debts," which really means getting the cost-sharing program to pay the whole cost.

Basically this distribution, we do see a tendency to move toward DRG-type reimbursement as an interim move, but we see a need to get both the physicians and the hospitals into some kind of a capitation system. We really sort of internally do not believe the traditional coverage has a life expectancy of more than 5 or 7 years, because the kinds of deals that are being negotiated are just so awesome that they make you wonder about the business you have been in for the last 40 years.

We have, for example, I understand Miami was spoken about earlier this morning, we have an IPA in Miami with 500 physicians enrolled which has a network arrangement so that the number of people involved in any incentive pool is manageable, like 15. These people are giving us 15 percent reductions in fees. They are agreeing to holdbacks. They are agreeing to strong utilization management programs, as an agreement to participate, and our physician count is growing rapidly, so we think there is some potential to deal with it that way.

In the short run, we have to negotiate. I do object to the word "caution," to try and restrain what might be called the margin shift or the profit shift. Let me quote you another statistic from the same hospital. It is a large hospital. In 1982 their gross revenues per admission were \$4,100. That is their charge structure. The net patient revenue was just over \$3,000. Their cost per admission was \$2,550. What everyone is focusing on is the terrible process whereby we and the other insurers have to pay \$4,100, but we are really not getting at the issue, that the \$3,000 net patient revenue may not be necessary, and that the \$2,550 may not be necessary, and we think what we see as the potential is to get them involved in negotiations, where they price at something like their marginal costs. Once they price at their marginal costs, now they have the incentive to lower their costs, so we think that the long-term strategy is some kind of technique of capitation. We see DRG leading to PPO-type negotiations and a blend on into what has been called IPA's or negotiated arrangements really replacing traditional insurance.

Mr. MARKUS. Jack Meyer.

Mr. MEYER. I am concerned about this notion that an all-payor system is the only way, or definitely the preferable way, of dealing with the question of uncompensated care. It is a way, but I think that it is misleading to present it as the only way to finance uncompensated care, just as it is misleading to think a 5.79-percent adjustment for teaching hospitals is the only way to deal with the fact that they see more complicated cases. It seems to me that we need to entitle people and not hospitals.

I think the medicare funding problem is a kind of microcosm of a larger problem we have in this country, namely, that we are a badly undertaxed society in relation to the commitments we have made to people. You see evidence of it in medicare and in social programs as a whole. Why should a new regulatory system be the only way to deal with the age-old inequities in our welfare system which systematically excluded millions of people from help? Why should we not consider certain direct taxes, such as excise taxes, income taxes, or increased payroll taxes as an alternative way of dealing with this problem?

Of course, as soon as you make subsidies for uncompensated care explicit, everybody says we cannot afford it. They never think of raising that question when you propose a regulatory solution, because you pay in a different way. You do not simply pay out a little more taxes in April. In a regulatory system, you pay in other ways, such as queuing, or deterioration of services, or cost shifting. I would just urge that we not throw all our energies into trying to get the right price for each hospital service or for each hospital, or trying to determine whether an appendectomy was complicated or uncomplicated. It would be easy for HCFA to spend all its time on iteration after iteration trying to set the relative prices of DRG's at the appropriate levels. I think we would be better off, both from the point of view of the uncovered poor as well as from the point of view of the taxpayers, if we devoted the time to developing a system of providing care and paying for care for those who cannot afford to pay for health care themselves.

In evaluating the merits of different systems, I think that we would find that some of the currently popular ways, like all-payers or cost shifting are, in fact, not the most equitable ways of paying for uncompensated health care.

Mr. MARKUS. Ben Lawton.

Dr. LAWTON. A couple of suggestions. They have dipped their toes in it, but as the only physician here, if it is all right with you, Glenn, I will shift to Dr. Fox's paper regarding physician reimbursement.

I have a couple of general criticisms of it, and some specifics, and my general ones are that, No. 1, it shows amazing naivete in judging the actors out there, namely the physicians.

Second, and more importantly, his method of changing the system, while claiming to be aimed at cost control, at least in part, comes through to me as pure and simple making the system more acceptable to physicians.

Now here is a group that is averaging \$100,000 a year per physician in net earnings. I do not think they need any protection. On the other hand, on the last page, there is one paragraph that says finally we must consider the adverse effect on beneficiaries.

Ladies and gentlemen, that is what we should address first. Physicians are very likely going to take care of themselves.

[Applause.]

Mr. MARKUS. You just stepped in it, Ben.

Dr. LAWTON. Pardon?

Mr. MARKUS. You just stepped in it.

Dr. LAWTON. Specifically and I do not want to get too picayunish here, but you discarded some solutions rather casually, such as the fee schedule, and mandated assignment, and here is where your naivete regarding physicians comes in. With the hassle going on out there now that Mr. Flaherty just described, there is no physician going to turn down patients or money. They will take assignment if it is mandated.

The other shaky assumptions, one is that the fee-for-service system is going to prevail in the foreseeable future. I think this is very uncertain. I think Mr. Flaherty was speaking to that. Things are changing rapidly.

The other naive assumption was that this plan would somehow convert physicians into rational health planners. It defies history. They have never wanted to participate. It is unlikely they would, but the plan design I would like to address a little more, your target levels are based on historical, last year's exorbitant usual, customary, and reasonable fees, and to add insult to injury, you suggested that you might set the target levels higher in those low-cost areas, like Tacoma. Did you ever think of cutting the target in Miami? These fees for some of the surgical procedures are absolutely vulgar. I am a surgeon, by the way.

The reward and penalty bit of it boggles the mind. The penalty part would be easy I think as you mentioned. You just withhold 20 percent, and if you come out all right at the end of the year, they keep it, or if you do not come out at the end of the year they keep it, but dividing the reward. I have had more than ordinary experience splitting the pie in a medical group, and to suggest that the physicians in an area should get together and decide how to split up the money would create a 18-month fight every year. It just cannot be done. Regarding assigning the areas, anybody who thinks it is easy was not mixed up in the hassle about HSA areas.

Lastly, assignment, mandatory assignment, is a necessary part of any system that is going to work. If not, it is the beneficiaries that are going to suffer. Right now they are getting hit with these bills, and these old people will pay their doctor bills before they will buy food and fuel, and as I mentioned before, the current climate is such that there are very few physicians who would turn down a mandatory assignment and not treat medicare patients. In fact, I think the medicare people would be better off if they got rid of those doctors.

As you may have gathered, Dr. Fox, I am not enthralled with your system. I do think it is going to be very acceptable to physicians. I think it will hurt beneficiaries.

Mr. MARKUS. Dr. Fox, would you like to respond?

Mr. Fox. I appreciate all the compliments.

I am not sure the paper, however, was fully understood. First off, the gist of the paper is not to make the system more acceptable to physicians. If it has that as a byproduct, then great, but the real issue is how does one more rationally allocate or incentivize the moneys that are flowing through the system now. That is the objective. Whether the proposal does it is a separate issue.

The fact that the adverse effect on beneficiaries, is dealt with only in the last paragraph should not be used to infer that I do not care about beneficiaries. What I am saying is that if one can find ways to alter the incentives within the existing system, doing so is a preferable alternative to raising taxes, and certainly a preferable alternative to hurting the beneficiary.

I am afraid we will probably do a combination of all three, and we may do more hurting of beneficiaries if we do not address the underlying incentives.

With regard to whether the fee-for-service system will prevail, I am not sure that Mr. Flaherty and I are all that far apart. What we are seeing with private carriers and with large groups is not the elimination of the fee-for-service system. We are seeing a different

nature of negotiation with that system. Where that will lead, nobody is really sure.

One of the interesting phenomena, for example, is that most of these changes to date appear to be taking place in the context of large groups rather than small employers, and half of all employees work for firms with fewer than 100 employees. This is predominantly a nation of small businesses and we have not seen a lot of changes among small employers.

With regard to PPO's, we do know how successful they will be. There are only about a dozen in operation right now and only seven or eight that have more than 5,000 enrollees, six of which are in the Denver area and have their own unique history. But none of that means the demise of the fee-for-service system. It means a change in the relationship between the purchaser and the carrier on one hand and the fee for service on the other.

It is not my intent to convert physicians into rational health planners. I am not sure I would know a rational health planner if I saw one. I am trying to change the incentives.

With regard to the target levels, there was absolutely no intent—and I thought I made this clear—to keep Miami where it was and raise Takoma. One could, in setting the target levels, look at whether one would want to squeeze harder on some areas than others.

With regard to the rates of increase, yes, I confess I am a gradualist. I am saying if one set the target at the rate at which expenditures would normally escalate—and that is, to be sure, a very high rate—and if the penalties were symmetric and everybody ignored the incentives, then you would have no effect on expenditures, but you would have a lot of hassles on area designation and some higher expenditures on administrative costs. If one set it at that high a level and the incentives totally failed, then there would be no effect on benefits payments.

If, on the other hand, the incentive started to work, one would start to see a decrease in the rate of escalation, and that would be reflected in subsequent years. That is a very gradualist approach.

One could make another policy judgment which is not to allow historical rates of increase but instead to allow some estimates of inflation, plus a factor for population growth, intensity, but not necessarily enough to reflect past history.

With regard to the statement that I was discarding fee schedules for mandated assignment, that is not true at all. Much to the contrary. I make a point very strongly in the paper that we are year by year moving toward fee schedules because of the impact of section 224, and one that is of the worst type, because it maintains in place the ratios among procedures that were in effect in the base year, 1973.

So in no sense am I against fee schedules. In fact, much to the contrary. Nor am I against mandated assignment. And as the physicians supply increases, I think mandated assignment becomes more and more feasible.

Mr. MARKUS. I would like to pursue one line of questioning. I will ask Bill Flaherty and Mr. Cohen to answer the same question basically.

What can Congress expect at the margin with regard to the situation that you described in Miami or elsewhere in Florida, or in the State of Maryland, if in effect mandated assignment is imposed only on medicare? What would the response of your private sector activities be?

Mr. FLAHERTY. The key concern I have is when you say mandate, you assume that the people being mandated agree and support your policy and your goal, and I am not sure that is the case.

If all you do is tell people you will limit their price and they think you are being unfair, they will find a way to get it back, through usage patterns.

The strategies which seem to be working, which key off the early experience of the HMO's, and puts groups of physicians together into relatively small networks—15 to 20 physicians with their own incentive pool—and then they work on the basis of both price and use—and there you get some leverage going for you—I would be concerned in a marketplace like Miami that if you just do mandatory assignment, what you will get is a lot of gaming. You will get some people to fall in line.

In the current market, very few people walk away from it. I think there will be a series of reactions following that, fragmentation of billing practices, and so on. And they would be of great concern to us.

Mr. COHEN. I have been in both Miami and Baltimore, and I can't tell the difference between a physician in one community and a physician in the other. I expect they act pretty much the same way.

I would indicate, however, that the question of physicians is very largely related to the costs—not of their fees, but of their style of medical practice. I am not all that sure that medicare wants to mandate assignment in the sense that it wants to assure that its patients have fully paid access to physicians who practice very expensive medicine. And I tend to agree with Peter that one of the major problems is the relative fee relationships between invasive medicine or doing things as opposed to practicing primary care.

I would like to see some focus on those changes, if you want to get some changes that will save money for medicare.

Mr. CONSTANTINE. The tax approach seems to resemble the British National Health Service, with budgeted, regional programs. It would also tend to freeze the medical model in a region where the doctors control the total scene.

I happen to agree with Ben. My own approach would be a scheduled allowance approach under medicare where the physicians are in or out. You accept assignment on all your patients or none.

The Government is an insurer, and the obligation of the insurer is to the insured—not to the doctor. If I buy a policy from Prudential, their obligation is to me. I am paying the premium. And the same thing is true in medicare. These are the resources of the program developed by the premiums of the elderly, general revenues, and this is what we pay for given procedures.

There are ways to adjust it so the doctors don't game the system.

I know Peter is an HMO advocate and pushed for the 95-percent payment, but if medicare pays 95 percent of \$1,600 in Miami, are we getting a bargain? Is that saving the Government money?

The GAO did some comparisons between medicare prevailing charges and what Ontario pays. Bob Iffert gave those figures in a recent speech. For example, on a cholecystectomy, medicaid pays \$725, but in Ontario, with a high cost of living, it is \$246. It is \$918 for prostatectomy in the United States; \$243 in Ontario. And so on.

If you doubled what the Canadian physicians are receiving—and I am sure they would say that that would be helpful—we would still be way below. I don't think our physicians are underpaid by any means in this country. Their incomes are understated because of group practices and the enormous range of writeoffs and set-asides that they have been allowed to take in the last few years with various pension plans and things that show up as office expenses.

Mr. MEYER. I think medicare could take a few lessons from the medicaid payment system. We need more flexibility in the medicare payment system like the flexibility in medicaid. However, the flexibility should be limited to the payment system and should not extend to the benefit structure.

I think that the medicare program could have a uniform benefit structure and still have different payment systems around the country. I am arguing for more use of waivers. In medicaid, we have some States, like Utah, adopting DRG's, some, like California, using negotiation models, others using primary care networks, and still others implementing all payer systems.

We need to take a look at the evaluations of these different methods, particularly the methods of paying doctors.

I am amazed at what doctors around the country are willing to try in the medicaid program. For all the talk about how they will stonewall medicaid program initiatives, physicians are, in fact, participating in everything from self-screening to PCN's, and other types of at-risk situations.

Some of these systems will work and some won't, but the Federal Government might be able to learn from the way medicaid pays physicians and may realize that there is probably no one right answer that we can stamp out in a sort of cookie-cutter formation.

Ms. LAVE. This unfortunately may be one comment back, but I want to make it anyway, Mr. Constantine made some reference to the Ontario system.

In addition to the differences in the prices, there are some other aspects of Ontario systems that lead me to wonder whether the Canadian system is becoming more or less relevant to the American system.

The issue of volume in Canada, it is not considered as serious, although physician volumes have in fact been increased.

Most technologies in Canada are not located in the physicians' offices, but are located in the hospitals. There has not been a rapid diffusion of the very sophisticated technologies out of the hospital into the physicians' offices. That particular aspect of medical care practice is much more controlled in Canada than in the United States.

Mr. MARKUS. Mr. Zimmerman.

Mr. ZIMMERMAN. Under the existing medicare system requiring physicians to accept assignment doesn't generate any revenue for medicare or cut program costs, whereas the proposal Peter is making deals with what medicare expenditures are in a given area,

and if you are talking about containing medicare costs, you can focus on that.

Restricting physicians' level of reimbursement, requiring them to accept assignment won't generate any more revenue for the medicare system.

It may result in manipulations taking place and in the end, it may cost medicare more money.

Mr. MARKUS. Bruce.

Mr. VLADECK. Three or four people have expressed concern about the degree of slack, for want of a better word, that currently exists in our price bases, whether it is defined in terms of medicare per capita expenditures in Miami or in terms of physician fees, or whatever.

The fact that the market basket for hospital inputs has increased faster than general inflation also must be considered in light of the fact that, in an industry with gains in productivity and real incentives to increase productivity, you probably change factor mix. So instead of talking about 30 percent of the increase in price per case arising from intensity, that number ought to be more like 50 percent.

And if that is really true, the base from which we are working is highly inflated for hospitals as well as physician fees, outside of the city of New York, of course.

In that context, market basket minus one and a half for a few years doesn't seem so terrible.

If we go that way, we can all go home. We might as well use the excuse of concerns about the trust fund to make some other reforms anyway, but first we have to make some fundamental, analytical decisions about hospitals. All this other stuff is marginal. There is one basic number. The annual rate of per-case inflation.

Mr. PRUMUS. Four so-called problems need to be addressed when you consider physician fees. Given these four separate areas, one needs more policy tools than just manipulating physician fees. The four problems are: The relative prices for different services and treatments imposed by the fee schedule, the supposedly high physician incomes, the volume of services that physicians order, et cetera, and the extra charges that they impose upon beneficiaries, if they do not accept assignment.

Being an incrementalist, I would reject Peter Fox's plan, even though he goes after the right problem first, and that is the volume of services. However, the DRG system, if the hospital is to survive, will force the hospital to pay very close attention to the volume of services that doctors prescribe in their hospital.

I understand that about 50 to 60 percent of physician fees are in the hospital setting. Those fees could be combined into the DRG price, and while that doesn't take care of the surgery centers, and the other location problems, it is an interim solution to the volume problem.

It seems to me that the extra charges imposed upon beneficiaries could be handled either by the legislation the Committee on Ways and Means recently passed in mandating assignment, or by segregating physicians into whether or not they accept assignment, by providing more information, and letting beneficiaries decide what physicians they want. All of those solutions should be tried.

If you believe physician income is too high, perhaps rather than adjusting the fee schedule, one could change tax law in the area of pensions, tax shelters, and other things.

Mr. MARKUS. Bob Derzon.

Mr. DERZON. The Swedes go to Israel for dental care and with Jay's suggestion, I suggest that maybe Congressman Waxman would add coverage to Canadian physicians so we can send American medicare patients to Canada.

And since there is a 10- or 15- or 20-percent discount on the dollars, we get an extra break.

Mr. WAXMAN. That was reduced.

Mr. DERZON. Jay, that is a great idea.

The assignment issue goes beyond the point of whether we save the medicare program money and it really boils down to the promise we made to the American people. Medicare was going to pay for something.

We have destroyed the integrity of a Government promise.

The other thing is that as you begin to think of all the other options in medicare which might be some additional cost sharing, you may want to use the dollars you saved by forcing assignment, using some of those dollars for some other form of cost sharing that is more productive than overpaying physicians, physicians who are overcharging.

Nothing has been said, really, about selective purchasing of services and I want to pick up a point that was made about learning some lessons from medicaid.

Medicaid is 53 experiments and medicare is one big gigantic experiment, and you can make some colossal mistakes. We have some interesting experiments in selective purchasing where we have limited the choice of providers, but I have not heard anybody talk about trying that on a very limited basis for certain kinds of high-cost procedures in medicaid or medicare.

I have never been a proponent for free choice, mostly because our medicare patients have some very excellent choices and some awful choices. I don't know as the Government ought to promise all the awful choices along with all the good choices.

We could try some things particularly on the high-cost end of medicare to get our patients, to offer them incentives and opportunities to take their benefit packages to more limited providers.

We do that at crippled children's programs in every State of the Union, and it is one of the more successful programs.

Mr. MARKUS. Dr. Lawton.

Dr. LAWTON. Peter, I apologize if that was a low blow, but the other comments regarding the fees being related to the style of practice, I would submit that they are more related to the style of life.

In that vein, on that premise, I agree with you wholeheartedly that the physicians' excessive income could be attacked in other ways, and certainly it was enhanced during the last couple of years with the tax breaks.

The other thing Mr. Cohen mentioned was the matter of the differential between procedural, surgical, or endoscopic or what have you and cognitive services, this has to be addressed.

I make more money before breakfast on my day off than a pediatrician can make working all week, as a surgeon I can.

Well, the way to address it is not to pay the pediatrician all that more, you have got to cut the surgeon, and these foolish endoscopic procedures that they are getting \$600, \$700, they have just got to be controlled, and so do surgical fees. I am all in favor of paying the pediatrician more, but to bring him up to the level of the surgeon is an unlikely way to save money.

Mr. FLAHERTY. I want to support the concept about selective contracting. The responses there, the increasing number of physicians has changed things. I wanted to comment briefly about cost sharing today and medicare B.

If you take a run of medicare payments versus billed charges today, the program in Florida, 50 percent of the charges are being paid for by medicare. There is a very substantial cost sharing going on. That is true not only because of the usual and customary limits, but also medical necessary disallowances and coinsurance provisions. That elderly patient is turning around and paying \$45 for supplemental insurance which reduces some of that out-of-pocket, but not all of it, so there is a heavy involvement now, and the point is, if you attempt to mandate a reduction in fees and a conservation in utilization, you are going to get involved in nationwide collective bargaining, and the political prospects of that are terrible, whereas if you break it up and you have multiple competing organizations in any one marketplace, people will do things in a competitive mode they would never agree to in a mandate or coerced mode, because very frankly, they have the hammer.

Mr. MARKUS. Mr. Cohen.

Mr. COHEN. I believe what I had said before was the cost to medicare of a patient going to a particular physician has more to do with that physician's medical practice style than it has to do with the fee for the physician, him or herself. I believe that is correct, and suggest that selective contracting and managed care is the way to go to handle that sort of problem.

Mr. MARKUS. Wendell.

Mr. PRIMUS. I would like to add to the comment of Hal Cohen several minutes ago. Perhaps, the next thing to do which would be consistent with the integration of parts A and B, would be to make the physician fee a part of the DRG payment, and let the hospital and the doctor work out what is the right reward or payment for their respective services. There may be a problem in this proposal in the tradeoff between a medical solution to a problem versus a surgical solution. Perhaps by combining the hospital and physician payments into one DRG, the relative tradeoffs facing the doctor and the patient in the hospital may lead to the wrong result. But it seems to me that that is one option for paying physicians that ought to be seriously explored.

Dr. LAWTON. Peter pointed out that that is an option, and it could be quite easy to do in a hospital, particularly with procedural things, but almost impossible on an outpatient basis where 60 percent of your physician charges are made.

Mr. CONSTANTINE. I do some work for the nurse anesthetists, and you could put them in the DRG and they would be happy. As someone who went through the freedom-of-choice fight in 1981 to try to

get that in medicaid I can see a real problem in getting preferred providers for medicare. I was doing some work with the Governors then and we had a battle to get the House to accept giving the States the latitude to assign people. You would have a much greater fight in the case of medicare. The argument would be about mainstream care and unless you change that for the system as a whole, you would have a much, much tougher time with medicare on a preferred-provider basis.

If Blue Cross and Blue Shield and the others, if preferred providers became common as an insurance approach, then medicare would have a much easier time directing its beneficiaries, but I think that, without a change in a system—this is one case where I do not think medicare will lead.

Mr. FLAHERTY. I recognize the difficulty. I look at any metropolitan area, I envision multiple selective contracting arrangements, so that the patient has multiple choices within his community.

I think that if you view it along those lines and say, well, what is the strategy? The strategy is to say we must get up and running a number of experimental programs in the next couple of years, to select common themes and impact on the cost in that fashion by having approved models, and the other thing that is critical is to have enabling legislation, because there are a lot of State-level barriers, much as we did in HMO's 10 years ago. There need to be supportive kinds of Government posture because what has happened is, something mentioned earlier, all the providers look at insurance as the honey pot and they have succeeded in getting mandated benefit arrangements at the State level, and you cannot selectively contract in many cases and still comply with the insurance code's requirement for mandated benefits, so some facilitating legislation, it seems to me is important to get selective contracting going.

Mr. MARKUS. One last area, briefly. If I detect any consensus among this panel, which has considerably divergent views, it is that the financial incentives to affect the behavior of physicians are at best somewhat tenuous.

Does this mean the future and the hopes for PRO's are quite limited? In other words, are they almost irrelevant to the question of the budgetary problem, and if not, what can we expect from them?

Mr. MEYER. I do not really accept the premise that the ability of financial incentives to affect physician behavior is tenuous or limited. I do not think we have tested it very much. We have had an open-ended cost-based reimbursement system that we are just now beginning to change. Where we have changed the system under medicaid, there are some promising results as well as some pitfalls. Bear in mind that these results are preliminary since many States have only recently gotten waivers. I am anxious, though, to act on Mr. Flaherty's suggestions that these models should be studied.

The fact that payment system reform can only slightly touch the growth path of outlays does not mean that we should not consider it.

Peter Fox's model or other people's models should be given serious attention, even though they may only shave a half a percentage point off what health care will be as a percent of GNP. At this point, it would be a little unfair to conclude that incentives could not have an impact.

Mr. FLAHERTY. I met with the Kaiser folks when we were first getting involved in the HMO's, and I drew up a planning document and put in the need for profit sharing for success and I passed it back to my friends at Kaiser, and the economist wrote back and said, "Dear Bill: three programs have it, three don't. They all have the same utilization."

Following on that, in discussions with them, they talk in terms of a 3-year period for new physicians to become familiar with their values and viewpoints, and approaches. We have HMO's that we run. I sit in regularly on the meetings. The medical director in a closed-panel HMO is constantly talking to his physicians about referrals, admissions, testing procedures, and sharing each individual's pattern with the balance of the small medical group, which puts an intense peer pressure on these fellows to respond to certain expectations.

In the open panel we conduct a similar program, and we have a daily visitation of every hospitalized patient. Now, if you talk about PRO's and you talk about PSRO's, you say is it a realistic expectation that nationwide we will gear up organizationally to that degree of utilization management in the near term, and I don't think we can answer, yes.

Mr. MARKUS. Jay.

Mr. CONSTANTINE. I think that there are two aspects. One is the physician's economic interests, and the other is professional practice. I mean, they are not unrelated, but they are separable, and I believe that effectively supported, that the PRO's now, whatever the bastardized name is now, do have a vital interest, have a legitimate interest in monitoring professional practice in identifying inappropriate utilization and avoidable utilization, because there is an alternative there, too.

The alternative is to have a carrier or intermediary or a State do precisely those ineffective and unacceptable review efforts which led to the original PSRO legislation. There are quite a few good doctors out there practicing medicine. They are not all greedy.

Mr. DERZON. We have been looking at quite a lot of utilization review programs in different parts of the country. I had some experience with the PSRO program. I think that the big difference I see is that utilization control does work where there is an absolute determination on the part of an affected party to make it work. We have the bizarre circumstance out in Hawaii where the utilization for Kaiser is higher than it is for the Blue Cross program, not much, but higher, and why? Because that particular Blue Cross type plan is absolutely determined to keep their utilization program in a line.

You can see that in the business promoted programs where business is either hiring hired guns to do this work for them or contracting with an aggressive PSRO but holding them accountable.

The big problem I see is that medicare doesn't have anybody out there holding them accountable. I don't know who is going to hold the PSRO's accountable, and I think that has been the most difficult of all problems, and I think Helen Smits, who is here, would probably say that is at least one of our most important and difficult issues, but the fact is that utilization controls where properly done, can reduce substantially the amount of care dividend.

If you want to see one place where it is not so properly done, just take a look at California medicaid, where utilization is down 25 percent, and there has been nothing to change incentives. In fact, there have been some things that may have worked the incentives the other way, but people are not going into the hospital in California for most elective work.

Mr. MARKUS. Hal Cohen.

Mr. COHEN. The question had to do with the extent to which physicians' practice styles can be changed through changes in reimbursement, and I tend, to a fairly large extent, to agree with something Victor Fuchs wrote a while back, and that is that if there was one thing that he could change, it was the nature of medical education.

I expect that changing the nature of medical education will have more to do with changing the nature of the way medicine is practiced, than changing reimbursement methods. The Government should think about using the immense amount of money that it pours into medical education to have some influence in achieving that result.

Mr. MARKUS. I would like to take this opportunity if we can—go ahead, Ben.

Dr. LAWTON. If I may just reply to that. This has been suggested often over the last 15 years, that you expose the medical students to compassionate people and you change their outlook on life, and they no longer think about money. I brainwash my medical students that I have with me all the time, and when they leave as seniors, they have learned my dictum that if you waken in the morning thinking that you are going to work for money, don't get up.

They come back to me 5 years later and sit across the desk saying "I still want to save the world, Dr. Lawton, and money means nothing. I would be willing to start at \$80,000 if I go up rapidly."

Mr. MARKUS. There is no way to add to that. Let me ask the authors of the paper to take about 3 minutes, if they would, in light of this discussion, to summarize their views.

Ms. LAVE.

Ms. LAVE. The medicare program has just embarked on a major experiment which we are going to watch for some time. I have made some proposals that will increase the viability of that program.

We have not spent much time here arguing whether it will work, except for Bob Derzon. What we have argued throughout the day, both this morning and in the afternoon, is that we have had a technology driven system. We to have to find out if we cap the system and limit the resources, we change the nature of the technological flow into the industry.

I am hopeful that something will be said about this tomorrow. If we stick to this system, we would expect some changes. I have always been impressed, for instance, with the kidney program. This may not seem relevant to this discussion, but in 1972, when the kidney program was introduced, there was a price that was set per dialysis and it has been a little high. In 1982 the effective price or average was unchanged. But I am totally convinced that if it had

been set on a cost based system, that by 1983 it would have been considerably higher.

There was a fair amount of technological change in that industry, but the nature of the technological change was different. So we will have to wait and see.

The other issue is that the DRG system may collapse, and I would point out I do have a mild suggestion for how to return to a variant on the prospective payment system. As Mr. Flaherty has pointed out changes in the private sector work with those being made on the public sector. Both sectors are trying to lower their expenditures. In addition, there are some conditions which suggest that this effort may be successful.

First we have an excessive supply of physicians.

Second, we probably have an excessive supply of hospital beds.

And third, we have the major private payers the employers who in fact are terribly concerned about the costs of their health care. They are concerned with whether they are competitively viable in the international market.

These conditions lead one to believe that major real changes in fact will take place. The prospective payment system for medicare is a major instrument for change—and this system or a variation of it, will be successful.

Mr. MARKUS. Peter Fox.

Mr. Fox. Just some potentially, slightly random comments.

First, I would like to come back to the need, as other people have expressed, for more focus on the total volume issue. I think that the prospective payment system that passed will help, although I happen to agree with Judy entirely, that it is being implemented at far too fast a rate, and indeed the budgetary savings could have been achieved through other mechanisms. Similarly, the HMO provisions I believe will help, but it is an incomplete strategy.

I also think that the interarea differences that exist are very real problems. The areawide incentives is one approach to them. There are others. For example, Jay sites the question of whether paying in Miami at 95 percent is such a good thing to do, and I think he may be right. Maybe we should vary the AAPCC payment level, say, between 90 and 100 percent, depending on how the area compares to a national norm.

Also with the prospective payment system, one could vary those prices, based on aggregate expenditures or alternatively based on admission rates, but it doesn't totally solve the problem.

It is likely it seems to me that the best next step is some large-scale demonstrations, and potentially, and this is anathema to many people, some demonstrations where participation either by beneficiaries or physician or both is mandatory. For some reason we are willing to implement programs on a national scale that are absolutely mandatory, but we are not willing to engage in experiments on a smaller scale where participation is mandatory. Doing so would entail some changes in legislation to be sure, and one would need to build in some safeguards particularly to protect beneficiaries, but there are a number of approaches that could be used.

With regard to what I would consider to be some of the more micro approaches, I personally favor explicit fee schedules. We are

moving toward them anyway, and one of the objectives would be to cut down on some of the high fliers. However, the real issue is not one of finding ways to reduce physician incomes. Yes, there are some that are egregiously high and ought to be addressed, but I agree with Dr. Lawton.

I am not terribly interested in cutting the income of the typical pediatrician. However, the real issue is how do we reorient resource consumption, which is not the result of market pressures, and is seriously out of whack.

I also would favor changes in assignment policy. Like Jay, I would favor moving to either all or nothing mandatory. If the aggregate assignment rate drops as a consequence of moving to all or nothing whereby the physicians are entirely in or entirely out, I am not sure I much care. The one thing it does is inform beneficiaries. They know in advance what they are facing and I think it will start to reduce the confusion and start to put some pressure on the physician to accept assignments.

The assignment issue is not fundamentally a budget issue. It is fundamentally a beneficiary protection issue.

Also, measures could be taken in the way of information disclosure.

Two States, by State law, are in the process of moving toward mandated information disclosure by both physicians and hospitals. Those are the States of Iowa and Indiana. Minnesota is in the process of doing something similar. I don't fully understand it, but one result of the interplay between the public and the private sector has been that the hospitals have published DRG prices, and the hospital trustee councils in the Twin Cities are urging physicians to post their own prices, and as I understand it, many of them are doing so.

With regard to the matters of whether incentives work, I think they clearly do. What we don't know is how, we don't know how large they need to be, and I am not sure they need to be particularly large. The Kaiser example that there are three regions that reward physicians explicitly for efficiency and others that don't is, I think, important to reflect on, because it says that we don't fully understand what is going on. What is clear is that Kaiser as a unit has incentives, and physicians are responding to those incentives through peer pressure and through management changes that would not have occurred in the absence of those incentives.

With regard to whether we can be achieving the same effect through the PRO's under the current system, I don't think we can. As Bob correctly points out, private purchasers that have been successful are able to deal with the review organizations in a way that I think medicare is just incapable. It isn't that the people in HCFA are any less smart. It is just it is more difficult to deal on a hands-on way for a Federal agency than for a private agency. I can draw an analogy that illustrates the point. Last week I went to a French restaurant, did not go to a Chinese restaurant. That is fascinating to everybody, I am sure. The point is that I did not have to publish in a Federal Register the processes whereby I selected the French restaurant, whereas once you start taking certain physicians and saying, "You are out of the program," you have to go through certain due process approaches that are in our traditions, for good and

valid reasons, that the private sector simply doesn't go through. As we see private purchasers achieving some very dramatic successes in provider negotiations, I think one needs to be rather careful about making the leap and saying the Federal Government ought to simply do the same.

In some cases, one could simply adopt the private sector processes. In other cases, it would be very difficult for the Federal Government to follow suit, and then I come back to trying to achieve some more aggregated financial incentives, and at least trying on a demonstration basis to see if they work.

Mr. MARKUS. Thank you, Peter, and we would like to express our appreciation to this attentive audience.

We have, with your permission, a few administrative announcements by Mr. Rettig.

Mr. RERRIG. Maybe you want to express appreciation to the panel and authors, moderators, and so forth.

[Applause.]

[Whereupon, at 5:15 p.m., the conference recessed, to reconvene at 8:30 a.m., Wednesday, November 30, 1983.]

WEDNESDAY, NOVEMBER 30, 1983

Mr. PAUL RETTIG. Welcome to the second day of our conference on the future of medicare.

The program today involves two main topics: technology and approaches to financing. The first panel involves the subject of technology, and the moderator is Judy Miller Jones, well-known to many of us, especially in Washington, who work in the health policy field, as the director of the National Health Policy Forum, which has been immensely helpful to people in the legislative and executive branches as we try to understand better the world of health policy.

Judy.

TECHNOLOGY

PANEL:

JUDITH MILLER JONES, Director, National Health Policy Forum, Washington, D.C.
RICHARD A. RETTIG, Ph. D., Department of Social Sciences, Illinois Institute of Technology

DAVID BANTA, M.D., Deputy Director, Pan American Health Organization, Washington, D.C.

GLORIA RUBY, Analyst, Health Program, Office of Technology Assessment, Washington, D.C.

ANNE BURNS, Project Director—Medicare Project, Health Program, Office of Technology Assessment, Washington, D.C.

GLENN MARKUS, Specialist in Social Legislation, Congressional Research Service, Library of Congress, Washington, D.C.

JOHN REISS, Ph. D., Esq., Dechert Price & Rhoads, Philadelphia, Pa.

HELEN SMITS, M.D., Associate Professor of Public Health, Department of Epidemiology and Public Health, Yale School of Medicine

KARL D. YORDY, Senior Program Officer and Director, Division of Health Care Services, Institute of Medicine, National Academy of Sciences, Washington, D.C.

Ms. JONES. Good morning and a warm welcome to all of you on the second day of this historic event. It is indeed my pleasure to introduce to you this panel. I will be introducing to you Dr. David Banta, who prepared this morning's paper; you will be hearing from him shortly.

Before that, however, we are going to hear from the lead commentator, Prof. Richard Rettig from the Illinois Institute of Technology. Professor Rettig has worked previously at the Rand Corporation, and is quite an expert on the uses of medical technologies, on kidney transplants, and other things.

I hope that most of you have read some of his work.

Richard, you may lead off, please.

Mr. RICHARD RETTIG. Thank you very much.

The focus of the panel a few weeks ago was coverage. Upon arrival here yesterday, I discovered that it has been changed to technology, and I wish to comment to the effect that the problem for medicare is coverage, and the decision process, and the concerns

are coverage. So I am going to be addressing myself to the focus of coverage and not the focus of technology.

The problem is how technology and technology assessment bears upon coverage decisions. Let me give you some terms. The covered procedures: those procedures, items, services included in the medicare benefit package for reimbursement by medicare.

Coverage decisions: those determinations by medicare as to what procedures to cover, including what limitations to impose. They pertain in particular to the approval of new procedures and services and at least in some measure to the review of currently covered procedures that may be applied to new uses.

Using coverage policy deals with essentially two issues: The criteria and the procedures by which coverage determinations are made.

Let me make a prefatory comment about today's paper. The title says using coverage policy to contain medicare costs. The stated purpose is to describe some possibilities of using a more explicit approach to medical technology assessment for containing costs in the medicare program.

I take the basic proposition of the paper then to be that technology assessment as applied to coverage decisions will act to contain medicare costs.

Now, I intend to summarize the paper initially, comment on what I regard as the strategic policy choices confronting the Congress and the administration in terms of medicare coverage and treatment of technology, and provide you then a critique of the paper in terms of the proposals of merit and some of the problems.

The paper by Banta, Ruby, and Burns, "Using Coverage Policy to Contain Medicare Costs," has essentially five major parts in the way I summarize it here.

First, a general set of propositions about medical technology, health, medicare, and cost containment. One is medical technology contributes greatly to the cost of medical care and is the source of important benefits in the treatment of patients.

Second, there is considerable waste in the system, or excessive costs that are attributable to waste in the health care system, that are attributable to the inappropriate use of technology.

That is largely because the incentives of the reimbursement system encourage the introduction and use of technology when any benefit exists, no matter how small that benefit might be.

The authors seek to challenge the future as being to devise a system that encourages cost-effective use of technology.

In their view, medicare warrants special attention for three reasons: the costs of medicare have increased more rapidly than health costs generally. Medicare intersects strongly with the hospital, which is the institution that is a high user of medical technology, and third, it deals with the elderly who are high consumers of costly technology in areas like intensive care services, and as some of us heard last evening, a good deal of high consumption of medical services is in the terminal year of life.

From a strategic point of view, the authors make the following points: that the flow of technology to the medical market is sufficiently complicated in terms of the number and diversity of sources, that efforts to assert control over development is not, or

over research and development is not, particularly fruitful or feasible strategy, that the focus has consequently been on the stage of early diffusion of medical technologies through gateways established by the Food and Drug Administration, in the case of drugs and medical devices, to assess the safety and efficacy of medical technology, and that the discussion has now moved to the point where there has been an important realization that reimbursement, the way in which one reimburses for medical and health care services and thus for medical technology powerfully affects the introduction and use of that technology.

At this point in the paper, the authors say the following: controlling costs means controlling technology, and the reverse is also likely to be true. Those are basically the general propositions.

The second portion of the paper deals essentially with the medicare coverage system. The context is one in which the medicare statute specifies that certain benefits shall be covered in broad terms; that is, hospital benefits.

It establishes some general and categorical limitations. For example, it excludes podiatrists' services, and services like cosmetic surgery is excluded, but the law does not provide HCFA with a list of specific procedures, services, technologies to be reimbursed or make coverage decisions about particular medical technologies.

Criteria, first, the criteria and then the procedures under the current system. Criteria are set forth in section 1862(a)(1) of title XVIII of the Social Security Act which specifies a criterion of reasonable and necessary.

The words read: "No payment be made under medicare for any expenses incurred for items and services which are not reasonable and necessary for diagnosis and treatment of illness or injury."

The regulations, to the extent there are implementing regulations, add safe and effective, and further, that a procedure not be experimental.

The claims processing procedure includes the safe and effective criterion and adds language to the effect that it is medically necessary, or the procedure may be medically necessary in the particular case, and furnished in accordance with the accepted standards of medical practice and in an appropriate setting.

The authors note that these criteria, first, give broad discretion to the Secretary of Health and Human Services, and by delegation down through HCFA, to the administrators of medicare, that neither the cost or cost-effectiveness is included in the criteria for decisionmaking, and that there is not any authority in the statute at any rate for selective coverage decision—determinations which would restrict the use of procedures to particular settings, particular qualifications of physicians, or particular indications for use.

The process by which coverage decisions are made involves one of identification of candidates for coverage determinations by the contractors; namely, intermediaries and carriers, by HCFA regional offices and by the central office.

Increasingly, procedures or candidate technologies are identified by manufacturers who come directly to the central office of HCFA.

The various sources of identification are claims review, audits of cost reports, informal interaction with providers and manufacturers' inquiries, as I mentioned.

The authors identify flaws in this process of identification that relies upon the intermediaries and carriers, that claims review forms are not designed to identify new procedures, that the categories within which reimbursement occurs are too broad to always identify specific technologies, that the sampling procedures that carriers engage in is a 20-percent sample of the claims form, that oversight—that is, failure to take account of things as a behavioral characteristics of the intermediaries and carriers, as well as administrative inefficiency, coding errors, and then the problem of deliberate deception by rolling in reimbursement for a new procedure within an established code—hides the fact that there is a new procedure.

Those are some of the problems.

Now, the contractor has apparently great discretion, although there is little data about actual decisionmaking at the contractor level.

They would use advice of medical consultants, reach determinations in the majority of cases, submit a referral to the HCFA central office where the matter deserves attention, or may refer it to the regional office to then in turn be transmitted to the central office.

Regional offices play a fairly major transmission role. At the level of HCFA, the office of regional policy with the receipt of the referral secures medical determinations on safety and efficacy in a variety of means, but one traditional means is reliance on inquiry to the Public Health Service, which was administered by the National Center for Health Care Technology, and that group would canvass expert opinion, refer back to medicare for final coverage determination.

In essence, the authors say this system has worked in ways that do not impose a great deal of discipline or screening on the new technologies as they come, do not include considerations of cost, and there is a tendency to pass things on into the benefit package without much consideration beyond the safety and efficacy criterion or their effects on medicare.

The third part of the paper deals with the impact of the diagnostic-related groups, and the prospective payment system on coverage decisions, and the authors present essentially seven points in this section, that the DRG's have changed the incentives affecting the introduction and use of medical technology in a way that would cover cost-reducing technology and inhibit cost-increasing technology.

Second, that the broad DRG categories, like the broad coverage categories, do not provide great help in the identification of specific medical technologies requiring coverage decisions.

Third, that the DRG rate adjustment process is likely to identify new technologies requiring coverage decisions as they are presented for inclusion in the rate base.

The fourth is the techniques that are appropriate to the DRG rate review adjustment process are likely to be the same as those to be used for coverage decisions.

The major difference, and this is the fifth point between the DRG adjustment process and coverage decisions, is that DRG adjustment clearly will take costs into account.

A sixth point is that the DRG system may also provide an incentive to shift the location of use of certain procedures and technologies from the high-cost hospital setting to lower cost institutional settings.

They note, finally, that the DRG's do not yet include physician services, so on.

Now, there is, I should note in passing, a report that has been issued by the Office of Technology Assessment on diagnostic-related groups and the medicare program, implications for medical technology, a technical memorandum on which the authors drew and discusses these issues at some great length.

A final section of the paper, as I summarize it, involves a variety of recommendations for tightening up the coverage determination process in the interest of cost-effective technology.

First, they approve of strengthening the legal authority of the Secretary to make coverage decisions.

Second, they argue for reorganizing the coverage process to encourage the identification of all new or emerging technologies.

Third, they believe that the contractors, intermediaries and carriers should refer all coverage decisions of national interest to the HCFA central office for review at that level.

Fourth, they are strongly of the view that one should include costs as an explicit criterion in the coverage decisionmaking process.

Fifth, they argue that HCFA should have the explicit authority to limit coverage to certain settings, providers, physicians, indications for use and so on, that providers should be required to supply data for HCFA review in the coverage process before coverage decisions are made, that there should be uniform implementation of all national coverage decisions, and finally, that there should be a study of the evolving relationship between coverage decisionmaking and the DRG system.

I will come back to these in a moment in my comments that follow. Potential cost savings to medicare, there is very little analysis of this.

The authors do conclude that the combination of techniques and steps that they identify in the paper can offer some of the following benefits: While no firm estimate could be made of potential savings, we believe that present expenditures in the medicare program could be reduced by more than 10 percent without affecting health status and without reducing access to needed service, they write.

Now, let me comment on—those are the main categories in which the paper, as I read it, presents, and the main argument of the paper. Let me comment on what I consider the strategic choice questions, and observe that I do not think that the paper sets the issue in these contexts, but essentially, there are two.

First, one should rely on the now-to-be implemented DRG system for obtaining savings relative to the current level of expenditures, or second, one should augment the DRG system by a tightened coverage determination process that would realize further savings.

Those seem to me the two broad strategies one wishes to consider.

Let me comment further along the lines of a conceptual framework which may be of some assistance. First, what one is talking

about in my judgment in tightening, is a conceptual framework for thinking about tightening the coverage process requirements.

One is talking about increasing the threshold costs, time, data, legal proceedings and so on, required to bring a new procedure to the market, so the health care market closely associates with private sector markets.

There are several parts to that. In introducing threshold costs, one is trying to convey a signal to the developers of new medical technology that costs matter, and if you would wish to, you might call that the new product division of the health care system.

In the calculations about new product development, cost becomes a central criterion in what to bring to the market. Mechanisms for doing that: direct controls or incentives, or whether the two are fused is a complicated question.

The second conceptual point, one is seeking to establish incentives that would assert discipline over time of the marketplace, and thus encourage cost reducing process innovations. The paper is silent about process versus product innovations. It is a crucial distinction that has strong bearings on the cost dimensions.

I will comment on a third point. The purposes of tightening the coverage system are: one would be to delay or to screen out the introduction of new product innovations or technologies or procedures that are cost increasing and capability extending, especially where the cost effects are major and the capability effects are not particularly important. This is an easy case.

Second, to delay or screen out entirely major capability extending product innovations which have major cost consequences, especially if life extending for the elderly. I want to draw these in the starkest terms.

Third, to encourage cost reducing incremental process innovations and capture the benefit of those process innovations.

Fourth, to encourage cost reducing new product innovations that substitute a new way of doing things, a new technology for an existing one.

Let me comment briefly on the process innovations. In a study done a number of years ago on the production of rayon fiber by the DuPont Corp., it was found over a 40-year period across six production facilities, the study found the cost decline in constant dollars, and it was also found that two-thirds of that cost reduction was attributable to minor incremental process innovations over that period of time. It is well known outside the health domain, but it is of crucial importance for those that are technology-based in terms of physical terms.

Let me mention something more immediate to medicare and that is the renal situation where dialyzer costs have, as an element of the total cost of dialysis, the cost of membrane have remained essentially steady in current dollars and declined about 50 percent in constant dollars over the decade which medicare has been paying the bill.

There has been a screening for an effective payment system to providers. The DRG system has existed for the past 10 years, and that the manufacturers have had both an increased demand, a good deal of learning and a strong incentive to be competitive. Feedstock prices for dialyzers have gone up due to oil price in-

creases in the decade. Therefore, the less, at least 50 percent decline in prices, some savings generated by the manufacturers, some by the substitution of capital for labor, a large dialyzer shortens dialysis time and you can put two shifts of patients on one nursing shift.

We have discovered for the frail elderly woman of 98 pounds, you can dialyze her for 3 hours and reuse the dialyzer.

A whole lot of learning is going on of a different sort because of the incentive to the way you reimburse, no adjustment upward in a 10-year period to the provider and now an adjustment downward.

The strategic considerations seem to me to be that the technologies in OTA are used very widely in the mix of permanent equipment disposables, physician time and health professionals, and the paper provides little guidance as to how we should take into account the variation and mix.

Second, the medicare market for the elderly and the disabled and the renal is often subjected to technologies introduced for the non-medicare market, intensive care, dialysis, a variety of things, a number of things that come into the market not directly through the medicare coverage process.

The real question that is raised by the paper, it seems to me—two questions—one of feasibility and one of payoff. Feasibility of doing technology assessment to improve coverage decisions to realize cost savings. What would it cost to do this? There is no cost estimate. Arnold Drummond suggested \$100 million was needed for technology assessment a few years ago.

John Bunker suggested in an independent technology institute assessment that they would need \$100 million from the public sector on an annual basis and perhaps that amount from the private sector. No mention of costs associated with what is being proposed and the related thing is the institution for doing it.

The final question is the question of payoff. How would the payoff take place? What would be the payoff? The 10 percent, how would it be realized, the steps between that, and the cost savings?

Recommendations of merit in the paper, I would identify the following: that the strengthening of HCFA statutory authority is absolutely necessary. If coverage decisions are to be tightened, it cannot be done without great secretarial authority.

Second, that there should be explicit authority for cost and cost effectiveness in coverage determinations.

Third, that there should be explicit authority for selective coverage decisions, selective to providers, to physicians, to patients, provisional relative to time in which cost data might be collected, elaboration of the established therapy continuum, and so on.

Fourth, place the data provision requirements on the advocates of new procedures and require that they provide such data before coverage determinations are made.

And five, to study the relationships with the DRG system, as it evolves.

Now, those are the meritorious things. Let me briefly comment on some of the problems.

The basic proposition of the paper, that technology assessment as it bears on coverage decisional result in a savings to medicare, is really not sustained by the paper itself.

Second, that the feasibility question of doing what is intended to be done is not really established.

Third, that the cost of doing what is proposed is not addressed. I mention that we are talking probably an estimate of \$100 million. Perhaps OTA staff have a lower number.

Fourth, the question of payoff is not addressed in terms of how you get to the 10-percent reduction in present medicare expenditures.

Fifth, the vision, admittedly a caricature presented in the paper is of a centralized decisionmaking operation, comprehensively identifying all new or emerging technologies of national interest, checking large amounts of data, broad in scope, high in quality, timely in acquisition on all new technologies relative to safety, efficacy and cost.

In order to insure rational decisionmaking, cost reduction and guidance to the policy decision, a set of assumptions that apply fine tuning capability that can be criticized on the grounds presented a number of years ago by Simon, simply overwhelms capacity, boggles the mind in terms of the resource requirements and may or may not have legitimacy, and the question of capture of that institution or such institutions is not addressed.

I will conclude by a comment that the real trick it seems to me, is not the question whether we agree that technology is the driving force in modifying health care costs or that something ought to be done about controlling costs or technology.

The real issue is, how to do it, and in that regard, we are not particularly informed by the paper as to the precise way in which we should go about it.

We have a promissory note that if we do technology assessment, that that will result in cost savings. We do not have the detailed kind of outline that really lets us close strongly with the problem, even if the primary objective is, as I indicated in my remarks, not to do cost effectiveness analysis but to constrain the cost growth of the medicare program.

Ms. JONES. Thank you.

Professor Rettig, that was a very fine summary of the paper. I hear in your closing remarks, however, a challenge to the authors, and I would therefore like to introduce the three authors of this paper. I mentioned earlier David Banta. I would also like to introduce Anne Burns of the Office of Technology Assessment, and Gloria Ruby, analyst in the health program at OTA. And now, permit me to introduce David. As most of you know, Dr. Banta was the Assistant Director of the OTA. Many of us now miss him because he has recently become the deputy director of the Pan American Health Organization.

David, the podium is yours.

Mr. BANTA. Well, Dick Rettig has generally done a fair summary of our paper. So I will pass over the parts that I think are fair and concentrate on the two serious misreadings of the paper.

First of all, in a prefatory note, let me say that the question of technology and coverage was an assignment to us. Any changes in medicare will affect technology, and we do not believe—perhaps this is not made sufficiently clear in the paper—we do not believe

the coverage process is necessarily the most desirable way to approach the control of costs or control of technology.

Coverage is the explicit process presently used by HCFA to deal with technology, and we were asked to play this scenario out a bit. We are personally skeptical, and again, if that doesn't come through clearly enough in the paper, we should revise it before it goes further.

The first serious misreading though, is that Dick Rettig repeatedly says that technology assessment is the focus of the paper, and that is not the focus of the paper. The coverage process is the focus of the paper. Of course, technology assessment of some kind is a part of the coverage process.

I am not sure what Dick Rettig means when he says technology assessment. If he means that somebody is spending 5 minutes thinking about whether or not the technology should be covered or not, yes, technology assessment is a central and integral part. If he means a comprehensive, scientific assessment as done by a few institutions in society, then that is an entirely different question. But we did not try to predict the costs of technology assessment because our paper is not about technology assessment.

A brief comment about "reasonable and necessary." Dick Rettig did say, at least implied, that it is presently defined in regulations. The term is not defined in regulations, and that is a serious problem. It is not clear to me, not being a lawyer, how far a definition in regulations could go in such directions as including costs, but at least some HHS counsels have felt that costs could be included in regulations. In addition, perhaps other areas, including sites of care, different providers, and indications for use, could be dealt with in this way. Perhaps we should explore this potential before we pass laws to extend the authority.

Perhaps the administration is not interested in this line. I do not think they are at the moment, but whether through regulation or through law, we certainly agree with Rettig's endorsement of our proposals here.

The problem is that the coverage process has just not been taken seriously. In our paper, we have provided options to use if one wants to improve and strengthen the coverage process.

A point that Rettig did not mention, as far as I can tell, is that coverage deals primarily with physician services. That is critical here. We now have the DRG system dealing with hospital services. One way to continue into the future would be to strengthen the coverage process as a way of dealing more effectively with physician services. Again, we don't necessarily endorse that option. We would certainly prefer to see physicians dealt with in a more explicit manner. Within a framework of broader changes in reimbursement policy, coverage policy could affect cost and even improve quality, if it were effectively developed.

Dick Rettig passes over our objections to this proposal entirely. Such a system would require much more effort to identify new technologies, and while the present system is not adequate, it is not at all clear that the cost of changing it dramatically would be worth the benefits.

Second, as Dick points out, strengthening coverage mechanisms would require centralization. We point this out explicitly, and we

even use the term giving decisions to HCFA bureaucrats. The feasibility and political acceptability of such a change is very much open to question. Neither of these moves, tightening the system to identify technologies or centralizing the whole process, would be technically easy and certainly would not be politically popular.

In closing, my opinion is that such changes are just not feasible. Thank you.

I might ask my coauthors if they have a brief comment to add.

Ms. RUBY. I would like to make one specific comment. OTA recently had a survey done to determine whether there is variation in decision making by medicare contractors—intermediaries and carriers—with respect to common wisdom regarding the coverage of particular medical technologies. The survey looked at 28 different technology categories. There was considerable variation as to whether the technology was considered new or experimental. There was considerable variations among the 89 carriers and 21 intermediaries in the survey. When HCFA's instructions were very clear and very precise, the variation was very slight. For example, intraocular lens implant is an experimental technology, and there are very clear instructions as to its coverage status. There was very good adherence among contractors to HCFA's instructions. On the other hand, if there were imprecise instructions or technologies were in the process of being valuated, there was a tremendous variation from one contractor to another regarding coverage status of the technology.

That is all I would want to say, except to concur in what Dave has said about the purpose of the paper.

Ms. JONES. Anne.

Ms. BURNS. A brief point. First, though, I do agree with what David said.

One of my major criticisms of our paper was about the feasibility, cost, and the payoff of doing some of the options presented in the paper. We do express our concerns about those things. There is one area, and that is in having explicit cost considerations in the technology assessments for coverage purposes, that may be more feasible.

Right now cost data are collected when the Office of Health Technology Assessments provides its advice to HCFA. That information is often provided by manufacturers or provided by providers, but it is not allowed to be used in any of the evaluations. It probably would not be a great addition in effort in order to have that kind of information considered.

That is all.

Ms. JONES. At this time, I would like to introduce the other panel members to you. Seated to my far left is Dr. John Reiss. With both a Ph. D. and a J.D., John Reiss was formerly assistant commissioner of the New Jersey Health Department, and then Director of the Office of Health Regulations in HCFA. He is now in the private practice of law; and I will ask him to speak in just a moment.

Glenn Markus is a senior analyst in the Congressional Research Service and you met him yesterday.

Next we have Dr. Helen Smits, who is the former Director of the PSRO program, and now associate professor of medicine at Yale. She is practicing today in the long-term care environment, working

in both nursing homes and hospices, and I will ask her to comment in a moment.

Finally, we have Karl Yordy, Director of the Health Services Division at the National Academy of Sciences Institute of Medicine, and formerly Director of the Office of Planning and Evaluation in the Public Health Service. Years ago, I might add, Karl was Deputy Director of the regional medical program, a program designed to bring new technologies into the field more rapidly.

I should point out that we have lost a panel member, and an important one at that, Dr. Ted Cooper, who was Assistant Secretary of Health several years ago and is now with the Upjohn Co. Unfortunately, Dr. Cooper could not be with us today, which is a loss because he has been both in government where he dealt with coverage and technology assessment kinds of issues, and in the private sector. He is now, as we say, a provider, and as such knows how realistic some of these things are that we are talking about, what the costs might be, and so on.

Professor Rettig has given us a handle that we might use to start. He mentioned that changes have already taken place in how new technologies are going to come to the market, at least with regard to the hospital setting, where DRG prospective payments will soon be in place. If there were tightened cost criteria included in the DRG methodology, how would this affect the implementation of new technologies, as opposed to a much tighter coverage process to slow down the adoption of new technologies?

I know that had Dr. Cooper been here, he would have talked about these changes taking place. Since he could not do so directly, I will try to interject his comments, to say that we have such a fragmented system here now, it is going to be very difficult to decide how well any of these procedures are actually working. Because we have DRG's being implemented on a piecemeal basis—not in every State, and certainly not with every hospital coming in immediately, it takes time to change behavior. It is also difficult when you have physicians in the private practice of medicine able to purchase certain technologies and make money by doing so, while hospitals, if they purchase those same technologies, perhaps not making money while utilizing them. So, we have some cross currents here, and I think he would throw up a flag of caution.

I am, therefore, going to ask John Reiss if he might comment now, because he is working with clients who are hospitals and suppliers. John, since you have also had perhaps the longest experience with DRG's, having worked in New Jersey, the birthplace of DRG implementation, would you tell us what is this all going to mean?

Mr. Reiss. If anybody knew what it would all mean, I think they would be a millionaire. It is clear already that, even though the Federal medicare program is not yet prospectively paying all hospitals, many hospitals are changing their purchasing patterns with respect to new and existing technologies. Some device manufacturers in particular are experiencing already a significant decline in the demand for their products.

It is clear that, insofar as the implementation of DRG's is concerned, cost-lowering new technologies or new applications of existing technologies will diffuse rapidly, whether or not they are cost

effective (and that probably does not matter if all you are interested in is total reductions in medicare expenditures).

The major technology issue I see is with the higher cost and cost-raising new technologies applications. The fixed medicare price is based on a medical classification system which harks back to the 1970's, ICD-9-CM. ICD-9 was developed by the World Health Organization in the late seventies. While some of the DRG's based on ICD-9-CM may be good for a long time, some of them already do not cover procedures or treatments which came into existence in the intervening period. In addition, the medicare DRG prices are based on 1981 or 1982 costs, inflated by much less than hospitals have been experiencing in the past 2 or 3 years, so the prices are likely to be significantly lower than current costs.

Incidentally, there are radical differences between the medicare and New Jersey systems. In the latter, each DRG is paid individually for each hospital, and a major part of many DRG price is still hospital cost-based. Included costs are different, outliers are treated differently, and so on. Indeed, there is almost no identity between the systems at all except in the basic element of payment.

A really important question is What will happen to high-cost or cost-raising technologies, of which some are already in existence and not accounted for in some of the DRG bases, and others are waiting to come on line?

Now, if the Federal Government wishes to ration, and reduce access to such new technologies to the elderly in particular—but of everyone, since with 40 percent of hospital revenues covered by medicare, you are driving the whole hospital systems—the Government can simply not make adjustments to DRG's and their prices. In that way you will control a major part of increasing costs fairly effectively.

On the other hand, if you are concerned that a number of new cost-increasing technologies or applications are cost effective and beneficial, then there has got to be a system to identify them and make appropriate DRG classification and price changes. I think David is absolutely right in the paper discussion. The question I think Richard raises is what level of cost do you want to incur when instituting a review system that makes sense from a procedural point of view, what level of cost increase triggers a review and what costs are included from the point of view of establishing standards for cost-effectiveness analysis.

My concern is that, with DRG recalibration taking effect in 1986, there is going to be a major change in the introduction of cost-raising technologies and applications. There appears to be some evidence that in societies which have chosen to severely restrict the rate of increase in medical care expenditures, technological advances have dropped considerably, especially in the device area.

Ms. JONES. Thank you very much, John. Let us move on then and talk about to what extent DRG's may be used as a technology assessment kind of apparatus. I would like to throw this question at Karl. Years ago we used to talk about speeding up the diffusion process. Today we are talking about slowing it down. To what extent can we face politically, technically, ethically, if you will, some of these hard choices of rationing of some technologies which may often be life saving.

Mr. YORDV. I am not sure I can say what the relationship to DRG's is going to be, except to second what John said in that we are obviously introducing a very different set of incentives into the system, which is going to affect the diffusion of technology. I think we all agree on that, but I would like to broaden the question a little bit, Judy, to something that I see as important. When we talk about generating new data and knowledge about technology costs and effectiveness, safety and efficacies, it seems to me its impact ought to be thought of in a broader context than just coverage decisions or how hospitals are going to make decisions in the context of DRG's.

We heard yesterday a great deal of discussion about various means of stimulating choice, incentives for choice, on the part of both consumers and providers. Obviously DRG's are one of those incentives, but we heard a number of others, and it seems to me that some of the discussion of technology needs to be in a context of how we are going to better inform choices that we seem to be committed to have people make. I think we can take DRG's as a precursor of the future in which many incentives will be changed. I think that bears on Dick Rettig's comment about the resources needed to get a better sense of what is effective and how much it costs.

I believe that the resource commitment for technology assessment needs to be considered in this broader context of the direction we seem to be heading in this society that will require new choices. I think this is especially important when we consider that process of coverage decisions has not been taken very seriously, as Dave has already mentioned.

I think there is all sorts of evidence of profound political ambiguity about this subject, and we don't need to go through the stories of the demise of the National Center for Health Care Technology. The description of the HCFA process in the paper is illustrative of this ambiguity, and I think that we need to bring this issue onto the political agenda and get more of a consensus about which direction we want to head, if we are to make some progress in this area.

My final comment is that part of that ambiguity relates to whether you view medicare as an income protection program, or a health benefits program, and it seems to me that this ambiguity has been there for a long time. Yesterday we had a grocery store analogy. I would use the analogy of having a 25-inch Sony TV with remote control stolen, and then being asked by the insurance company, when you submit the claim, why did you buy a 25-inch Sony? Why didn't you buy a 19-inch portable of a cheaper brand? You could have watched TV perfectly well and this other stuff was just frills.

Anyway, I think this illustrates one of the sources of the political ambiguity that we have witnessed.

Mr. JONES. Thank you, Karl.

I would like to call on Glenn Markus now.

Mr. MARKUS. I would like, Judy, to just underscore, I think, what has been obvious in Dave's rebuttal remarks and what Karl has just alluded to; namely, that there is a confusion approaching this topic with respect to the medicare program of confusing technology assessments with coverage issues. We have no medical care tech-

nology assessment system which is community-wide in its application. As a result, medicare is driven, as are Blue Cross and commercial insurers, to resolving many of these technology questions, including cost issues, as John has suggested, in the context of coverage decisions.

This changes the focus from scientific evidence and concerns about the safety, and relative costs of technology to variety of political and societal questions, not the least of which is what should be the responsibility of any third party, including the Federal Government, to support innovation or to promote the diffusion of technology and new developments.

To show how complex the problem is in terms of its political dimensions, keep in mind Congress is now legislating in very small I's and small T's when it comes to coverage issues—for example, the frequency for the debridement of mycotic toenails—not the life-threatening, life-saving new technologies that we are concerned with.

Just imagine in your own mind that the newly formed DRG commission votes 8 to 7 after concluding that renal dialysis treatment is not always appropriate for payment purposes under the medicare program. How is this to help the Secretary resolve that coverage issue? We are not speaking to the technology issues, and I think we are not going to get away from coverage discussions for some time to come.

Lastly, I would like to focus again on the volume issue. That is, even if everyone in this room felt renal treatment were technologically appropriate, we still would have to face the fact that as the population continues to age, more and more beneficiaries can benefit from this particular treatment, if only to sustain their lives a little bit longer. This is a different problem altogether. We have not really asked ourselves a technology question at all, but we have raised other kinds of consideration, both ethical and political, which are not likely to be resolved in the context of this discussion.

Ms. JONES. Thank you again. At this point I think it is most appropriate that we call on a practicing physician to comment on the application of some of these concepts in the practice setting, and let me ask the question this way. If we are trying to slow down the infusion of new technologies, presumably DRG's are going to slow down the cost-increasing technologies, as John has pointed out, rather than the cost-decreasing technologies, but there is more to it than that. We could talk about downgrading what we pay for existing technologies, if the cost now seems too high, relative to the benefit that is gained.

We also, I believe, could talk about trying to displace outmoded technologies to make sure that we don't do more things than are necessary. It isn't just a question of whether we add something but whether we also take away other things.

Moreover, even if we had a technology assessment or evaluation process in place, as elaborate as it might be constructed, we would still have the problem of—once a technology has been decided to be safe, efficacious, even cost effective in some circumstances—how it would be used in the practice setting is another matter entirely. We have this problem now with the approval by the FDA of new drugs and devices.

I would like to ask Helen Smits if she might comment on the use of new technologies, the concern for quality and monitoring their use, as well as their introduction. Dr. Smits.

Ms. SMITS. I would like to clarify one issue: Translating Dick Rettig's terminology into my own. That is, that we do have a fair amount of control over new technologies from the health and safety side, as OTA has pointed out, when they are either drugs or devices. The one area where we essentially have no control over new technology at all is in surgical practice, and that is really what you are talking about when you refer to new process technologies.

There is an implicit argument in the paper which hasn't come up previously: That we should regulate surgery for health and safety reasons. This is an interesting and a troublesome area for debate, but it isn't the issue today. If we need to regulate surgery, we need to do so for everybody, not just for medicare. What we are talking about today is a variety of technologies, some of which are very well assessed from the health and safety side and some of which are not.

As a clinician, the main concern I would like to express has to do with the monopsony power of medicare. Roughly translated, that means medicare pays for a lot but not everything. What it does pay for is the elderly, and the disabled (we tend to forget them) and those officially disabled by the presence of end stage renal disease.

If you exert tight regulatory control, as this paper seems to me to argue you should, over technologies used for those patients, you will, as Dr. Rettig has clearly indicated, send a message back to the innovators. The message will be to avoid the old, the disabled, and those with end stage renal disease, unless you are developing a cost-reducing technology for use in a hospital. I think the impact of partial regulatory control is one of the major policy issues that comes up when we look at what we can and can't do with coverage decisions.

Let me just go on one step further to say I think it might be interesting to talk in some detail about the feasibility issues of tighter control over coverage, but we don't seem to be going that way.

None of us would argue about the need for useful information from technology assessment. It is the translation of that information into a regulatory process that I have concerns about. The paper states very clearly at the beginning that we got into some of this mess because the incentives are wrong. I would certainly argue that perhaps we should get out of it by making the incentives right, and at the same time making technology information available, rather than through regulation.

We had some very interesting ideas presented yesterday in terms of how to make the incentives right for doctors. One idea that never came up that I think is very clearly on the table, at least in the research community, is: can you revise the content of physician payment in such a way that you can produce better incentives for physicians. Obviously, the next step toward that is some form of DRG payment for doctors.

Ms. JONES. Before I turn the microphone back to Professor Rettig, I want to ask the other panel members if there is any other burning comment or topic you wish to put on the table.

John.

Mr. REISS. My concern is that this whole discussion of coverage has taken place in the context of the status quo, and assumed that all we should discuss is coverage in payment decisions as they are made at the present time. One of the great ironies involving coverage decisions is that the U.S. Congress is spending a lot of time arguing about making reductions in medicare and medicaid, and simultaneously there are bills to start funding all kinds of organ transplant activities, which is entirely a coverage issue.

Meanwhile Congress is refusing to pass bills which would add to maternal and child health programs, also a coverage issue, and simultaneously with that funding all kinds of activities in the National Institutes of Health which will lead to future coverage issues of incredible cost implications for medicare and all the other payors, and as Helen says, any of these decisions affect the whole system. It seems to me that we should not be beating our heads too hard against the wall of trying to get HCFA to set up processes and standards for technology assessment for hospitals, ignoring the fact that much of that technology will switch over to physicians' offices as rapidly as possible.

In any case, while Congress cannot make up its mind what to do about coverage, we are spinning our wheels in trying to discuss what to do about eliminating the rate of increase in medicare expenditures by limiting technological changes.

Ms. JONES. I think John has identified a problem that most of us in this room recognize—we often do many things simultaneously, a number of them conflicting and contradictory. That being the case so often in this town, let me apologize that we could not do justice to all the issues that could have been raised here. We have not talked about capital and the infusion of new capital into this marketplace. We will hope to cover some of those issues at a later date in various settings. With that, then, I am going to turn the microphone back to Professor Rettig to see if he has some comments.

Mr. RICHARD RETTIG. I do.

I suppose in response to Dr. Banta's comment about misreading the paper, it would have helped if the skepticism about the coverage process as a device for cost saving might have been stated up front. I think all of us might have read the paper a bit differently, and not been as vulnerable to the misreading that we apparently did. My basic assumptions in the focus on coverage were that this meeting has been called because of the imminent, that is, within 5 to 10 years, insolvency of the trust fund, and that the question then becomes what beyond what has been done already, namely, the prospective payment system, might also be done to augment and further improve the financial position of the trust fund.

It seemed to me there were two strategies. You just rely on the DRG system, and it is a powerful system, and may be powerful in ways that aren't predicted in the estimates in terms of what both the hospitals do, manufacturers do, and so on.

The one point I wanted to raise was, when I think about how one would do the second option of tightening coverage, there are some

steps that can be taken, but when one talks to the prospect, as I misread the paper apparently, of a large analytical enterprise, that would focus attention on these issues, I have a whole host of questions about the feasibility of really getting there in that manner.

I think the question of how one addresses the technology question is central. If neither technology assessment nor coverage decisions really are appropriate ways to go, then we are left about where we were before we began.

I am really not quite clear what kind of institutional mechanism, what kind of procedures, what kind of a strategy or tack that is really being discussed and being proposed.

Ms. JONES. Thank you, Dick.

David, would you like to respond?

Mr. BANTA. Well, let me very strongly ally myself with Karl's statement that technology assessment is an important activity in and of itself. Despite the fact that that was not the focus of our paper, it might have been a nice paper for this conference to have: Technology assessment as an aid to decisionmaking or to informed choice. I couldn't agree with Karl more that we need it in the present DRG system, we need it through the whole system.

I would like to briefly disagree with Helen Smits that we are only talking about surgery. Technology in medical practice, such as routine physicals, is also important.

Process technology, to use Dick's term, may be as important as surgical procedures. All physicians use processes and procedures, and many deserve assessment.

I want to be clear, in closing, that we do not believe that coverage is the most effective way to control cost or technology. We do believe that these processes should be taken seriously, and that they should be tightened. We believe that they can reinforce other changes, that is, putting the incentives in the right direction for physician services.

Some of the changes that we propose could then reinforce those changes. But without those changes the potential is clearly limited for the reasons that I identified.

Let me just end by reiterating feasible changes that could be made and, we think, should be made.

First, the present determinations in the coverage process are largely based on efficacy data or judgment. We could define reasonable and necessary to include other considerations, particularly cost. We could even develop a fee schedule based on technology and the cost of providing that technology, rather than the way we do it presently, which is to pay whatever the market will bear, to pay much more highly for technological procedures and much more highly for new technological procedures than for old procedures. The present incentives are really completely wrong, as far as I am concerned.

Second, limiting coverage of certain technologies, especially surgery, to specific providers or specific sites of care.

And finally, to limit coverage for specific technologies to certain specific indications of use.

Thank you.

Ms. JONES. I believe by the nature of this discussion we have demonstrated that this topic is like a waltzing bear that all of us are trying to hug—if not also learn how to dance with—and it is going to take quite some time to learn the steps.

FINANCING

PANEL:

- JOHN J. SALMON, Esq., Chief Counsel, Committee on Ways and Means, U.S. House of Representatives, Washington, D.C.
- JACK MYER, Ph. D., Resident Fellow, Director of Health Policy Studies, American Enterprise Institute, Washington, D.C.
- Professor KAREN DAVIS, Ph. D., Chairman of Health Policy and Management, School of Hygiene and Public Health, Johns Hopkins University, Baltimore, Md.
- DIANE ROWLAND, Research Associate, Johns Hopkins University, Baltimore, Md.
- HENRY AARON, Senior Fellow, Economics Studies Program, Brookings Institution, Washington, D.C.
- STEPHEN LONG, Ph. D., Associate Director of Metropolitan Studies Program and Associate Professor of Economics and of Public Administration, Syracuse University
- TIMOTHY SMEEDING, Ph. D., Associate Professor of Economics, University of Utah
- ROBERT MYERS, LL.D., Former Chief Actuary, Social Security Administration, Currently Professor Emeritus, Temple University, Philadelphia, Pa.
- ROBERT BALL, Former Commissioner of Social Security, Currently Visiting Scholar at the Center for the Study of Social Policy, Center of Social Policy, Washington, D.C.
- WILBUR COHEN, Formerly Secretary, Department of Health, Education, and Welfare, Currently Professor of Public Affairs, LBJ School of Public Affairs, University of Texas at Austin
- WILLIAM D. FULLERTON, Former Deputy Administrator, Health Care Financing Administration, Currently Principal, Health Policy Alternatives, Inc., Washington, D.C.
- LAWRENCE LEWIN, President, Lewin & Associates, Washington, D.C.
- EMIL SUNLRY, Director of Tax Analysis, National Affairs Office, Deloitte, Haskins & Sells, Washington, D.C., Formerly Deputy Assistant Secretary for Tax Policy, Department of the Treasury
- RANDALL WEISS, Ph. D., Chief Economist, Joint Committee on Taxation, Washington, D.C.

Mr. PAUL RETTIG. We are ready to begin our discussion on the issues of financing. It is my privilege to introduce as moderator one of my bosses. If you work on a committee, you have numerous bosses. One of mine is John Salmon, who is chief counsel of the Committee on Ways and Means. Most subcommittee staff directors would have the luxury of having a chief counsel who maybe didn't know too much about his area, but John Salmon is not fooled by any of this health jargon.

He was once a distinguished member of the staff of the Subcommittee on Health, and even though that was some years ago, he remembers it very well. John.

Mr. SALMON. Thank you, Paul.

I am in the awkward situation of having Paul on my left, who taught me half of what I know about health and Bill Fullerton, who taught me the rest of what I know, on my right.

I think it has been a good conference, and I would state at the outset I want to commend Paul for all of his organizational efforts. I have never seen anyone get so many people in this one room before—even for the most controversial tax bill.

The format of this, the final panel, will be similar to the previous three.

First, we will have a discussion of two papers prepared for the conference, followed by a broad ranging discussion of those papers, and of the financing problem generally.

Inevitably the discussion of the financing issue is related to the panels we had earlier because the long-range financing needs of medicare cannot be discussed without a look at, and an understanding of, what is going to be done on the benefits side, what is going to be done with coinsurance and other forms of cost sharing, and frankly what is going to be done in the payments area, whether it be reimbursement or some other form of prospective payment.

What we are here to discuss today is not the amounts that are needed for financing because those amounts would have to wait until the package is developed, but what are the preferable routes to go in terms of financing.

What are, from a policy standpoint and from a practical standpoint, the best ways to put together the financing needs for the next few years.

I would like at the outset to emphasize the last concept I referred to, which is practical. We have had a lot of theoretical discussion here in the last day and a half concerning what should and should not be done, but eventually decisions on medicare will be made in this room by the policymakers, and much of what they will have to decide involves what is practical, what can we do in the real world politically and practically.

I think we are very fortunate today not only to have distinguished commentators and authors, but also a very distinguished group of discussants, including many who have been involved in the most recent issue of social security financing.

I think we can learn from that experience. We have to build on that experience. Certainly what was done in social security will help, but also limit, what we can do in the medicare area.

So, without any more formal introduction, I would like to turn to Jack Meyer, who is the director of health policy studies of the American Enterprise Institute, who will comment on a paper prepared by Karen Davis and Diane Rowland who are currently at Johns Hopkins University.

Mr. MEYER. Thank you. I have been asked, in the first part of my talk this morning, to summarize the paper by Karen and Diane, and I will attempt to do so as accurately as possible. In my opening remarks, I will reserve any editorial comment, and I will rely on the authors to correct any accidental misreading I had of their paper or any accidental distortion of their meaning.

Then I will go on to critique the paper by Karen and Diane and outline the dimensions of the medicare funding problem.

Karen and Diane's paper shows that the fiscal problems in medicare are very real, but quite manageable, and I want to spend the first couple of minutes talking about their background section.

I am going to divide my summary of their paper into three sections. The first is the background section. In that section the authors remind us that medicare has been very successful in improving access to care for many of our most vulnerable citizens. They carefully explain the current sources of financing in medicare, the

current benefit structure, and the eligibility requirements under medicare.

Indeed, this section is such a clear explanation that I commend any of you who may not be familiar with all the details of the program to read it. It will clarify many things about the medicare program.

The paper includes CBO estimates of the future of the hospital insurance trust fund, and notes that it is projected to accumulate deficits of \$800 to \$400 billion by the year 1995. The authors also point out that this occurs because the fund's outlays are governed by hospital costs, while fund income is geared to earnings, specifically the earnings to which the HI payroll tax applies. They note that a gap is inevitable, and point out that rising hospital costs are more important in contributing to that gap than the aging of the population.

The paper shows how much taxes would have to increase or how much benefits would have to be trimmed in order to achieve solvency in the next 25 years.

The second part of their paper has to do with cost sharing. In that section Karen and Diane stress that cost sharing is not new and it is not insignificant. In fact, they point out that medicare covers only about 45 percent of total health care outlays among the elderly. Furthermore, in 1981 the elderly spent an estimated 10 percent of their money income on coinsurance and deductibles for medicare covered services, payments for services not covered by medicare such as nursing homes, and premiums for private supplemental insurance.

Although general revenues cover about three-fourths of the supplemental medical insurance expenditures, out-of-pocket expenses make up the other 25 percent, and they are currently pegged at this 25-percent rate through 1985. Out-of-pocket costs will certainly grow in absolute terms even if the 25-percent peg is allowed to expire.

They also point out that there is a widespread disparity among the elderly in the percent of income used for out-of-pocket expenditures. In fact, the amount of out-of-pocket expenditures paid by the elderly ranges from 2 percent of income for those with income over \$30,000, to 21 percent of income for those with income under \$5,000.

The authors contend that recent proposals for more cost sharing would exacerbate inequities in the system. They would probably refer to it as a "sick" tax on those who could least afford it. In short, this paper is critical of increased cost sharing as an option for bridging the gap, and it describes several options that should be considered as alternatives to cost sharing.

These options include HI payroll tax increases, interfund borrowing, increased use of general tax revenues, increases in specific taxes such as alcohol and tobacco taxes or value added taxes, and increased use of premiums. The authors seem to find the last option the most agreeable, and it comprises the major part of their proposal.

That leads me to the third part, and in many respects the most important part of their paper, namely, their proposal for meeting this gap between the inflow and the outflow in the HI trust fund.

To summarize, their proposal would merge parts A and B into one fund. The general revenues from medicare's part B SMI would go into this fund, as would currently scheduled payroll taxes for medicare's part A hospital insurance trust fund.

The remaining outlays would be met through one premium that would be income related. There would be mandatory coverage for SMI, unlike the current optional plan, and the premium payment would be administered through the Federal personal income tax system.

The authors list three questions or criteria for evaluating proposals: First, the impact on the financial soundness of medicare; second, the impact on beneficiaries, and they stress the distributional consequences here; and third, administrative feasibility.

The authors imply that you can establish the premium at a level that will eliminate as much of the deficit as you want. They use an illustrative numerical example, but I don't think they would want to be wedded to a single set of figures.

In their example, the Government could raise, through this income-related premium, some \$10 billion in 1985, over and above current SMI premium yield.

This would require an average annual premium of \$330 for medicare's 30 million beneficiaries. Not all beneficiaries would pay that amount, that is only the average. The premium varies with income, and in this example, the premium averages about 4 percent of the income of beneficiaries.

By 1995, the premium would raise nearly \$20 billion per year; that is, it would raise an extra \$10 billion in the first year, a little bit more each year, and by the 10th year or so the premium payments would amount to an extra \$20 billion.

They suggest that the accumulation of the extra revenue from this income-related premium would reduce the cumulative deficit from an estimated \$300 billion to about \$100 billion. The \$300 billion is the lower boundary of the range, which I think assumes TEFRA limits being continued.

Their main point, however, is that the deficit is manageable; that part of it feeds on itself through interest expenses on the cumulative deficit.

Therefore, early action, by reducing such interest expense makes less work for us later. They list four options for setting the premium, which I will briefly describe.

The first is a fixed premium for all beneficiaries whose income is over \$10,000, and no premiums, or premiums of varying amounts, for those with income at various levels below \$10,000. The other three options involve premiums set as constant percentages of adjusted gross income, taxable income, or tax liability.

These options are compared on grounds of progressivity, but all four options are judged more equitable than relying on increased hospital coinsurance.

Under coinsurance, the authors argue that only the 20 percent of the elderly who are hospitalized would contribute to a reduction in the deficit. This arrangement would place a disproportionate burden on the elderly who are hospitalized, and would not require others to pay a fair share. A premium increase would apply to all who could afford it, and it would not encourage or discourage use

of services. In contrast, they contend that a coinsurance increase would discourage use of health services and this worries them. They prefer a system that would have neutral effects on the use of services.

There are some administrative problems raised in connection with a premium increase, but these are deemed manageable.

Let me close the summary by saying that I thought this was an excellent paper, and this isn't just one of those professional courtesy "yes, but" type of statements. I really did think it was very clear, concise, thorough, and provocative. It didn't dodge the tough issues. It has a very clear explanation of the problem, and proposes a solution that is equal to the problem. It doesn't attempt to dance around the edges of the problem. I really found the paper quite useful and analytically very sound.

I did have some problems with it, however, which are largely a matter of difference in perspective, and I want to outline them in the second half of my talk.

My main concern is that coinsurance seems to be set up as a kind of strawman in this paper. The authors' proposal is evaluated only against this one major option, coinsurance, and I see two difficulties here.

First, cost sharing, with all its flaws, is not quite as bad as they present it. I will develop that briefly, but, second, and more important, there are other major options for meeting this shortfall that they do not thoroughly explore.

I think that some of the drawbacks of cost sharing they note are valid, but there are some offsetting advantages that are not acknowledged.

For instance, cost sharing could discourage some utilization that is largely unnecessary. The authors seem to depict all utilization reductions as bad, if they are triggered by cost sharing.

Second, it is important to point out that cost sharing itself could be income related, and the authors didn't acknowledge this.

They established the harshest case for coinsurance, which is why I used the term "strawman." There are administrative problems with relating coinsurance to income, but that is true of their plan, too. Indeed, the authors understate some of the administrative problems, in my view. These problems are a significant part of their proposal or any proposal and there is just one paragraph near the end that discusses them.

The administrative complications go beyond the difficulty of calculating how much a beneficiary should owe. In addition, there are some basic conceptual problems in their proposal. Using taxable income or adjusted gross income to determine premium payments may not accurately reflect a beneficiary's ability to pay.

A substantial amount of the elderly household income is not subject to Federal taxation, as we all know. Social security benefits used to be fully nontaxable, and now they are only taxed at the margin. The authors need to wrestle with the problem of identifying a good indicator of ability to pay, but more important, I think, they need to ask what other options exist for closing the gap between medicare resources and medicare outlays.

Several options that I think merit some attention are brushed aside rather quickly in the paper. For instance, alcohol and tobacco

tax increases are judged as beyond the scope of this paper. They state that this is getting revenues from what they call a new tax. That seems odd to me since we have taxes on alcohol and tobacco already. I think these taxes are a different way of trying to solve the problem, but I do not think anything can be ruled off limits.

The authors mention the possibility of using increased payroll taxes, but quickly say they are regressive. Well, compared to what?

All those options need to be ranked, along with their own, which may not be so progressive after all. Interfund borrowing, I definitely agree, is a very dangerous option. I don't favor it, but it should be at least discussed and reviewed.

I think that an income-related premium increase may be more fair than cost sharing, particularly as the latter is depicted in their paper, but it may be less fair than other explicit revenue-increasing options.

The problem, in my view, is that the focus of their analysis is too narrow. It looks at how to reconcile the fiscal needs of medicare with the well-being of medicare beneficiaries. That is an important perspective, but it is too narrow.

We also need to consider the broader question of how to balance medicare recipients' well-being with that of the younger working age population being taxed to support the elderly's needs. Furthermore, we need to balance the elderly's needs with the needs of low-income people across all age groups.

I think that the authors need to be careful in brushing aside the other financing options. They have not made a convincing case for ruling excise taxes and other taxes off-limits.

Payroll and income taxes are thrown into the equation, but only in the sense that the currently mandated taxes are put into the kitty. They are not used to make up any shortfall. This job goes to premiums, which means it goes entirely to the elderly.

The authors tell us, and tell us correctly, that the burden is fairly allocated among the elderly. In the sense that the well-to-do elderly pay relatively more and that the healthy elderly pay along with the sick, among the elderly, that is fine and I agree. But this ducks the issue of whether the elderly, as a whole, should have some of their burdens shared by the nonelderly.

Indeed, I think this burden should be divided. We have an underfunded program that is a microcosm of a whole set of underfunded programs in our society relative to the tax base. It would be a mistake to take any group of beneficiaries and load the entire burden on them for making up the difference.

In my view, Karen and Diane have allowed themselves to define the well off, and, hence, the able to pay, as the elderly well off. The rest of the rich have escaped scot-free.

This is unfair to the elderly.

I have spoken a number of times in this room, and so have some of you, about the need to avoid giving the elderly a totally free ride. As we tighten our belts and trim benefits for others, and their benefits should not be off limits.

But expecting the elderly to finance the entire medicare shortfall through premiums would seem to go too far toward the other extreme. This approach loads the full burden of the gap on nonpoor medicare recipients. We should follow the lesson of the social secu-

rity compromise of early 1983. Whatever its limitations, it was fair, in my view, because it balanced the legitimate interest of our senior citizens with the legitimate interests of taxpayers.

Each group gave up something. Recipients suddenly found their benefits taxed at the margin, and the retirement age increasing in the 21st century. Taxpayers found an acceleration in the scheduled payroll tax increase and other tax changes. The compromise resulted in a kind of sharing, if you will, estimated by some at a 60-40 split, and by others at 50-50. No one could contend though that either group had not made sacrifices.

We need an analog of this balance in the medicare program. I would combine the best features of the Davis-Rowland proposal with the best features of a coinsurance approach, while keeping in mind that the low-income elderly should be shielded from any additional burden, if not relieved from the present costs.

In addition, the best features of their approach should be combined with some form of revenue increase, which I would like to talk about shortly.

We should combine benefit redesign with an ability to pay criterion to foster a more equitable system. We should also establish improved incentives to economize on the use of health services.

With proper safeguards, and I emphasize that, such economizing need not jeopardize the access to, or quality of, care. We do have to be careful while economizing, but concerns about access and quality are not exclusively related to marketlike reforms or coinsurance. They hang like a threatening cloud over regulatory squeeze strategies as well, and they will be a concern in any other strategies we come up with for reducing this gap.

Lest I be misunderstood, let me stress that benefit redesign should not be relied upon to raise a lot of money. It is basically a fairness measure, but it could be used to reinforce the payment system reforms recently enacted in medicare; namely, the prospective payment approach. Without some modification, the current benefit structure which would remain untouched under this proposal, is incompatible with the intent of those recent reforms.

I think rather than state this on my own, I will quote a line from Senator Durenberger that appeared in the Congressional Record 2 weeks ago. Before introducing a couple of new bills, he says, referring to the current benefit structure:

These cost-sharing arrangements run counter to the reforms we have already enacted. Although prospective payment rewards the hospital for discharging a patient as soon as it is appropriate, present cost-sharing arrangements reward neither the patient nor the physician for similar behavior.

We need to establish in our country that an extra day in the hospital is not free. Yet, at the same time, it is unconscionable to ask the obviously sickest medicare beneficiaries to pay a portion of their hospital bill after the 60th day of a hospital visit.

The ability-to-pay criterion should be determined in two ways, not one. First, the expanded premium which I favor would be based on ability to pay, as Karen and Diane proposed, but second, there should be a maximum limit on the amount beneficiaries would have to pay out of pocket—a stop-loss provision in medicare—that itself could be based on ability to pay.

As I recall, this latter option was raised by Martin Feldstein a number of years ago. I am simply suggesting that coinsurance rates that are established according to ability to pay should also be established at levels that would give us some potentially favorable effects on the use of medical services.

These options should include safeguards, along with the legitimate goals of the authors.

Senator Durenberger's bill, S. 2163, would require beneficiaries to pay 8 percent of the deductible, which is \$21 per day, although some of you may think that is too high. The administration would require beneficiaries to pay 8 percent of the deductible for days 2 to 15 and 5 percent for days 16 to 60. Under these arrangements, the beneficiary would not be required to pay a portion of charges incurred after the 60th day of a hospital visit, as they are now. Maybe we can only achieve a contribution equal to 3 percent of the deductible for days 2 to 15, with no contribution thereafter. The point is, there would be some measure of cost sharing for shorter term stays in exchange for catastrophic insurance for those who are most in need; namely, those who have very long hospital stays.

The point is not to quibble here over what type of cost sharing to do. It certainly shouldn't be Draconian, but the provider-patient combination should not be totally indifferent to the cost of an extra day of care.

The combination of benefit redesign and ability to pay will only take us so far, however. Even adding this one extra dimension is not enough, and it should only take us so far. Tax changes should take us the rest of the way, and this is the missing variable in the Davis-Rowland analysis. I prefer more progressive taxes, but it may be necessary to make a series of adjustments in payroll taxes or increase alcohol and tobacco taxes which could raise a lot of money.

By raising excise taxes and broadening the personal tax base, we could supplement the type of change the authors urge and lighten the burden of such a change. Thus, the 4 percent of income that they estimate their premium would account for might be cut to 2 percent of income. The elderly would then pay a fair share based on everyone, not just the sick, and they would pay less because we, the taxpayers, would help out.

In closing, I wish to note that both tax subsidy caps and excise tax increases hold the potential for some favorable effects on cost escalation. There are many open-ended tax subsidies that could be capped, not just health-related tax subsidies. In fact, we could get a double bang from measures like excise tax increases if they both raised some revenues and lead to increased cost awareness and improved health.

In conclusion, I think that the authors were a little too critical of cost sharing, especially since what they propose is a cost sharing of its own kind. The cost sharing they proposed, however, is by the elderly as a group, vis-a-vis the rest of the society. I think that a more equitable solution to the medicare problem involves a balance between those who are being helped and those who are paying the bill for the help. We were able to achieve that balance in social security and should be able to do so for medicare.

Thank you.

Mr. SALMON. In summary, we have a very warm endorsement of the paper followed with an extensive "but." We will give Diane and Karen a chance to talk about the "but."

Ms. DAVIS. Thank you. That was a very excellent description of the paper and our proposal.

I will talk a bit about things that are not in the paper. Under the ground rules for the conference, we were asked to develop an approach, a solution to the medicare problem, and we have tried to be responsive to that. However, we assumed that reform of the financing of medicare would be part of a much broader scale reform to address other aspects of the medicare program as well.

For example, it is our basic assumption that the first emphasis would be on provider cost containment and incentives for efficiency and that the deficit in the medicare HI trust fund would be met primarily through either controls or incentives for providers to contain costs.

For example, with regard to prospective payment of hospitals, we assume that the current level of stringency in that system, namely holding increases in prospective payment under the DRG system to hospital market basket inflation plus one percentage point, would be continued from now on out. As the CBO paper yesterday indicated, that would reduce the cumulative deficit out to 1995 in the HI trust fund to \$93 billion.

If one simply maintained current policy with regard to DRGs out to 1995—it is not a \$400 billion deficit or \$300 billion deficit we are talking about, but a \$90 billion deficit. It is the \$90 billion portion that we would see addressed through financing sources.

In addition, we feel that to maintain that level of stringency for medicare over a long period of time does mean going to all payers system of prospective payment for hospitals.

This would affect not only medicare beneficiaries but those financed under private insurance plans as well. An all payers approach is very important to achieve that level of stringency and also to avoid the distortions that would come into place over a long period of time if limits were placed on care for the elderly alone. We also assume some of the ideas discussed yesterday, prospective physician payment with mandatory assignment, would be enacted, perhaps phased in, starting with physician services to hospital services.

The specific type of payment might be negotiated fee schedules or all inclusive DRG rates to physicians for services rendered to hospital inpatients. One might have a negotiated fee schedule and medicare might move to adopt some of the concepts of preferred provider organizations where physicians willing to take a lower fee schedule would be listed as preferred providers and that information made available to medicare beneficiaries.

We do assume that a reform of medicare on the financing side would look at physician payment as well as the other ideas for incentives and cost controls mentioned yesterday. HMO's, capitation payment more generally, second opinion surgery, and perhaps coverage redesign issues should be considered.

The other part of the broader reform would be looking at the benefit structure. Perhaps moving to a single deductible for hospital and physician services rather than separate deductibles by

merging part A and part B financially. We might also look at the benefit structure. We assume one would want to adopt a single ceiling on the expenses that the elderly would pay out of pocket for the entire range of medicare benefits.

Unlike Mr. Meyer's discussion, we do not think that cost sharing for the elderly should be increased. With medicare only paying 45 percent of the bills of the elderly, it is already fairly inadequate. In fact, one might want to move in the opposite direction and eliminate some of the incentives for medigap coverage by having better coverage of a basic benefit package to eliminate the need of the elderly to supplement with medigap coverage.

Furthermore, we assume that not only would you look at reforming medicare, but you would also open up the issue of reforming medicaid by redesigning it for medicare beneficiaries. Mr. Allen yesterday mentioned that 50 percent of medicaid expenditures in the State of Michigan go for medicare beneficiaries. Nationwide, 70 percent of medicaid expenditures go for the aged and disabled. There is no reason not to redesign medicaid for the elderly as a specific wraparound policy to supplement medicare.

Furthermore, we assume that there would be reform of long-term care coverage, which is very inadequately handled today in both medicare and medicaid. Perhaps optional coverage for a comprehensive package of long-term care benefits could be provided through an additional optional premium.

Let me turn specifically to our proposal. The basic philosophy behind the financing reform that we propose is that the current methods of financing medicare are based upon historical accident, and they do not lead to sound fiscal or health policy. There is no reason why hospital benefits should be financed by payroll taxes and physician benefits should be financed by general revenues and a premium.

We recommend a single trust fund for hospital and physician services, covering the entire medicare benefit package. Such a fund would provide great flexibility and great stability of revenues.

At the same time, we would recommend mandatory coverage of all of the elderly and those currently brought into medicare as disabled for all medicare benefits, not just part A benefits.

We do recommend that the current premium for physician services be replaced by a new premium to cover the entire benefit package and that the new premium be related to income. This is very important. Despite what is said about the elderly being wealthy, half of the elderly have incomes below twice the poverty level, compared with 30 percent of the nonelderly. Often the premiums at their current level are burdensome for lower income elderly not covered by medicaid. This form of financing makes sense apart from the need to raise additional revenues in the medicare program and would basically lead to better policy over time.

The second departure from the paper is based on the new cost estimates by CBO pointing out that simply maintaining the hospital prospective payment at an annual increase of market plus one would yield a \$90 billion deficit. This indicates one could scale down the illustrative example of an income-related premium in the paper. Instead of requiring 4 percent of average income of the elderly to eliminate the rest of the deficit, one could have a premium

set at about 2 percent of income that would generate \$100 billion out through 1995. That, in combination with the prospective hospital payment, would be enough to eliminate the deficit.

In practice with other cost containment measures, particularly on the physician side to free up general revenues that would have gone for physician services, this premium as a percent of income could be considerably less than 2 percent. In fact, one could start the premium at a fairly low percentage of income and gradually increase it over time, if needed.

We do feel that if the elderly are to contribute more than they currently do, and we should remember that they already pay substantially more for their own health care services—\$1,150 per person in 1981 for things not covered by medicare or medicaid—than the \$800 that the nonelderly pay for health care services.

We feel a premium is much more equitable than hospital coinsurance which places enormous burden on the 20 percent of the elderly who are hospitalized every year. The high cost of medicare is for the terminally ill, but there are many who are chronically ill, heart attacks, cancer, et cetera. Any attempt for additional cost-sharing payments on the elderly would hit the sick extraordinarily hard. Some 3 percent of the elderly account for 41 percent of medicare's expenditures with average outlays of \$17,000. Also, 7 percent of the elderly account for 65 percent of the expenditures, and many are the same people year after year. Any kind of cost sharing that would vary with the level of services would provide an extreme burden for those elderly.

Let me turn specifically to Mr. Meyer's comments. In terms of terminology, we are not well served by blurring terms and using terms in a lot of different contexts. Jack referred several times to means testing. We should be very clear about what that is. Taxes—income taxes—payroll taxes in this country vary with income. Welfare payments depend upon one's income. To say that both are means tested ignores the not too subtle distinction between taxes and welfare. It does not contribute to the public debate to call both means testing.

Yesterday we had as a definition of means testing, basing eligibility on the basis of income. To say that a premium that varies with income is means testing medicare gets us off into saying payroll taxes are means testing.

A premium on the elderly would in effect be a tax. I do not subscribe to the comment that cost sharing ought to be used to refer to premiums and out-of-pocket expenses for hospital and inpatient services. There is a difference between paying a fixed amount in advance which is neutral with regards to health care services and hospital coinsurance that are deductibles. The latter is a deterrent to care. I would reserve the use of cost sharing for those provisions that affect the use of services.

Jack Meyer argues that cost sharing is not so bad. Cost sharing for the elderly is already very high. We have a situation where medicare pays only half of the physician expenditures of the elderly. That is a very poor insurance plan. The elderly have substantial out-of-pocket expenses for physician services and even considerable expenditures for hospital services, where the deductible in 1984 will be \$356 every time an elderly person goes into the hospital.

Mr. Meyer said that coinsurance may in fact reduce unnecessary utilization. We heard that argued a lot yesterday. It is not a good technique for reducing unnecessary utilization.

It can affect an elderly person's need to get a cataract operation or a hip replacement operation just as easily as another type of hospital admission.

He says we need hospital coinsurance to affect the length of stay people are in the hospital. Our whole DRG payment system is designed to do exactly that by giving the hospital a strong incentive to discharge hospital patients more quickly. That incentive should be adequate enough to reduce any marginal extra days they might have stayed without socking them with a tremendous financial burden from additional hospital coinsurance.

Mr. Meyer said other tax issues should be considered besides just an income-related premium and I agree with him on that. We were trying to be responsive to defining an option for consideration, but we think everything should be open in this regard, particularly increased general revenues. If one were to set up a single trust fund with general revenues, an income-related premium paid by medicare beneficiaries and the payroll tax, you would have the flexibility to alter the general revenue contribution to that trust fund year to year, if it were necessary to tap that source.

Payroll taxes should not be off limits. We may need to increase them somewhat so that the nonelderly as well as the elderly are asked to contribute toward higher costs of the medicare program. I feel, however, on the whole, it is a fairly high tax now and one that hits fairly hard on lower income working families.

Alcohol and cigarette taxes, we did not discuss, but that is a very good idea for further exploration.

Mr. Meyer said the income-related premium on medicare beneficiaries has certain administrative problems and we agree. Working out a definition of income, one might want to depart from the current tax system definition of adjusted gross income to include such things as tax-exempt income. This was done in the recent social security financing plan.

Mr. Meyer concluded his remarks by trying to resurrect what I consider a dead horse, taxing employer contributions to health insurance plan as another source of revenues. He said this would raise revenue and lead to great cost awareness and improved health. I didn't want to let that one drop. There is no evidence that a tax on employer premiums above a given level would do anything at all about hospital costs in this country. CBO has estimated that it would have very little impact on coverage for hospital services, and there is no evidence that taxing employers' contributions would lead to better health care in this country.

There are a number of equity concerns, but we will touch on those later.

Thank you.

Mr. SALMON. Now that we have Karen's comments, we turn to Diane.

Ms. ROWLAND. When we looked at the options, we saw cost sharing as a major option being discussed in the policy arena. We did not think that it was a strawman at all, but we did think that cost-sharing was not a very feasible option and we ought to come up

with an alternative to cost sharing. One of the reasons that we felt an alternative was so important was that we looked at the group that bears the greatest burden of cost sharing—the near poor elderly, those who are above the medicaid income-eligibility level but are below 125 percent of the poverty level.

One of the studies that was particularly instructive was by Gail Wolinsky and Mark Burke. They looked at the 6 million elderly below 125 percent of poverty and found that roughly 1.5 million of the poor elderly have only medicare, and have no medigap policy to help them offset the cost sharing.

Yesterday we heard a lot about how medigap policies ease the financial burden, but that eased burden is not equally distributed among the elderly. Of the lower income elderly, 47 have medigap policies as opposed to 78 for the higher income elderly.

Those low-income elderly with nothing but medicare receive less care. They use less physician services and hospital care and have fewer prescription drugs, although their health status appears to be relatively the same as the low-income individuals with supplementary private insurance. One of our concerns, in looking at alternative proposals, was to try and not leave this group to face even greater cost sharing which could have a negative effect on their health status and access to health care services.

Thank you.

Mr. SALMON. Now that we have the authors in total agreement, we can move on.

The second paper which we will consider in this section is a more general paper which takes several alternatives available for financing and evaluates them using certain criteria. For an analysis of that we will have Mr. Henry Aaron, senior fellow at the Brookings Institution. He will comment and the authors will have an opportunity to respond.

Mr. Aaron.

Mr. AARON. Thank you very much.

If you listen carefully, you will probably hear some similarities of tone between Jack Meyer's comments on the previous paper and my comments on this one.

When a problem is complex, we usually try and break it down into separate pieces, each of which can be analyzed more easily than the whole. The medicare problem certainly does qualify as complex. Both analytically and politically, it is orders-of-magnitude more challenging than the social security financing problem which livened up Christmas and New Years 12 months ago.

The piece of the problem that Tim Smeeding and Stephen Long examine is the menu of ways to increase revenues flowing to the medicare trust funds.

I believe they have done a solid job in carrying out this task and shall have a number of comments on their specific results. But there is always a danger in pursuing the strategy of breaking up complex problems into bite-size pieces. The connections and interdependencies among the various pieces may be overlooked or underemphasized. So I will begin my comments with some remarks that touch on the Long-Smeeding paper only tangentially, at least at first, before turning to their specific results. I have no reason to

think that they are going to disagree in any substantial way with my obiter dicta.

The central point about the medicare problem is that it must be dealt with. This requirement is political, not legal. Congress could deal with the medicare problem, as it could have dealt with the social security financing problem, by authorizing the trust funds to borrow from the Treasury and to run negative balances. That course was not followed last year, and it will not, and in my view should not, be followed for medicare.

That means that benefits will be cut or revenue flowing into the trust funds will be increased and some moves in both directions will have to be made before the end of this decade. On narrow medicare grounds, however, no steps have to be taken immediately in the next few years.

The corollary of this observation is that the environment within which decisions about medicare are taken will be defined by whether or not Congress and the President find some way to close the overall budget deficit before the big decisions on medicare are taken. The fact is that cuts in medicare spending can at best make only a very small contribution in the next few years to closing the overall deficit, unless medicare is scuttled.

If the deficit is reduced principally by other means to manageable levels by, say, fiscal year 1989, the debate on medicare is likely to take place as part of a broad national examination of how we wish to organize and pay for the delivery of medical services. If the overall deficit lingers at or near its current size, the debate on medicare will inevitably be enveloped in a continuing effort to bring overall Federal spending and taxes into line.

The difference between these two points of view is profound. If the overall deficit has already been narrowed, we can begin from the recognition that most of our methods of paying for medical care, public and private, encourage the provision of all services, promising any benefit, even benefits worth much less than they cost. Beginning from this understanding allows us to recognize the nature of the problem that medicare faces and to see that it is no different from the issues that we face in deciding how to organize and to pay for medical services for all groups. It would lead us to consider limits on overall hospital budgets, changes in tax rules and other steps to increase price sensitivity by all consumers and providers, revision of reimbursement rules for services to all patients and other measures to alter general incentives.

The second point of view, the one shadowed by unresolved budget deficits, forces us to worry about how to cut Federal spending and/or to raise Federal taxes. It tends to downgrade the urgency of reforms in the overall financing and reimbursement system as second-order questions to be put aside until the on-budget issues have been addressed.

Congress has the ingenuity to close the medicare deficit without materially altering other financing arrangements, but I think it would be a public policy tragedy if it did so. The problem of restoring the reality of a budget constraint in the health care plans of all patients and providers is perhaps the most important issue of domestic social policy in the remainder of this century. The burden of the foregoing comments is that the readers of the Long-Smeeding

paper should keep in mind the environment within which the issues that they address will be resolved.

To begin with their introduction, they examine the fact that the medicare trust funds face trouble and that the source of that problem has little to do with the budgetary difficulties narrowly focused on medicare. The trust fund problem, like the promised execution on which Samuel Johnson commented, may concentrate the mind marvelously but it may divert us from the reasons why we got into the mess we are in.

Furthermore, the analytical approach of breaking up the problem into little pieces pushes us in exactly that direction. Thus, Long and Smeeding were requested to explore the consequences of alternative revenue sources for closing a large part of the medicare trust fund deficit. After an opening paragraph in which they press their noses against the window and look somewhat wistfully at the broader policy issues, they proceed to an expert and meticulous dissection of their piece of the problem.

The second section of the paper lists eight major financing alternatives, four kinds of taxes on the general population, and four taxes on beneficiaries. Long and Smeeding have rounded up the usual suspects: payroll taxes, general revenues, a value-added tax, or excises on alcohol, tobacco and gasoline are the general taxes.

A list of revenue-raisers from beneficiaries contains some familiar items: premiums, a tax on premiums for supplementary insurance, and two slightly more outré items, a personal income tax surcharge on the elderly and disabled or special estate tax, which is even more unusual.

The second section of their paper briefly provides the motivation for considering each of these revenue sources. Payroll taxes are familiar, and no current or immediately prospective beneficiary has paid more than a fraction of the actual value of the medicare benefits. General revenues already pay for most of SMI, and they have been used to an increasing degree for social security cash benefits. The value-added tax has long held some attractions to political swains, but it has not been the kind of tax they want to marry, at least until now. Excise taxes on tobacco, alcohol and gasoline have the obvious attraction that they penalize actions that increase medical outlays. The real levels of these taxes are lower in most cases than they have been in the past.

Turning to the specific taxes on the elderly, premiums on beneficiaries, certainly the flat variation, are that *rara avis* of economics, the lump-sum taxes that does not distort economic decisions, a tax that cannot be avoided because coverage is mandatory and causes no distortions, because no action other than suicide or criminal invasion can avoid it. The premium in this sense, I think, cannot reasonably be described as a means test. Because eligibility does not hinge on it, it would be a distortion to refer to a premium, income-related or flat, as a means test. It would make as much sense to say that national defense is means tested because it is supported largely by taxes that vary with income.

Premiums should be regarded in a different light. They are simply disguised reductions in social security benefits, if, as I suspect, they would typically be collected as an offset against monthly social security payments.

A personal income tax surcharge would be a more progressive change than the across-the-board premium. But how much more progressive, as Karen Davis and Diane Rowland's paper pointed out, would depend on the structure of the specific plan.

The tax on supplementary insurance like that famous antacid, would help fight deficits two ways. It would raise revenues directly and reduce costs by discouraging the purchase of cost desensitizing medigap plans. In an interesting section, Long and Smeeding suggest that the burden of such a tax may differ less than one might suppose from that of increased cost sharing because the latter would drive more people into buying more insurance. In both cases, they suggest, the distribution of the extra costs would be similar to that of premiums.

Finally, they look at a special estate tax levied on elderly and disabled persons unmarried at the time of death. If I were going to practice triage in the paper, this would have been the one variant that I would have omitted as not having much probability of being adopted.

The third part of the paper lists a number of evaluative criteria, distributive equity, efficient and behavioral effects, revenue, potential instability and administration and compliance costs. Equity in turn, comes in three forms: across generations, across income classes, vertical equity, and among equals.

The fourth part of the paper describes how each of the alternative taxes stands up to these various criteria. Most of the results concern the distribution among income quintiles of a tax increase of \$5 billion in 1975, roughly equivalent to a \$10 billion tax in 1985. That is enough to take care of the deficit problem, at least the lower variant described by Karen Davis and Diane Rowland.

The authors, in part 4, assume that all of the added revenue is collected successively from each tax individually.

The results are contained in three tables. I have only a few comments on them. First, it is important to keep in mind that because their analysis is dependent on cross-sectional surveys, data on the institutional population is missing because they are missing from almost all surveys.

The paper contains no explicit discussion of the rules of thumb used for allocating tax burdens, and I would think that would be a useful addition to the final published version.

The tables don't contain any surprises. General revenues and the income tax surcharges are progressive. The burden of payroll taxes as a percent of income is hump-shaped, rising and then falling in the highest income quintile. The value added tax and selected excise taxes increase in absolute amount with income, but they rise less than proportionately with income and hence are regressive. Premiums and supplementary insurance taxes are almost flat per capita, and are highly regressive.

These results follow a long tradition in tax analysis and partake of the same virtues and flaws as does that tradition. The results assume that behavior is unaffected by the tax changes, and they ignore high cycle effects, the fact that people typically move among income classes in the course of their life cycle. I think the omission of possible changes in behavior and the life cycle effects is serious, but this shortcoming is not peculiar to this paper. It is characteris-

tic of all of the tax burden analyses in the tradition of which this analysis follows.

The virtue of this approach is that if you are willing to assume that the shortcomings are not too serious—I am not sure quite what “not too serious” means precisely—the results give a crude and easily understood sense of the distribution of these taxes among income classes.

The tables, however, don't give very much guide to intergenerational distributional issues, because that requires the explicit attention to how people's incomes and consumption and tax burdens change over their life cycles. The tables give no guide at all to the issue of horizontal equity, which requires that one go behind broad income classes, such as income quintiles, and look at the micro-data.

Table 4 presents some detailed results for the separate excise on alcohol, cigarettes, and gasoline, and the conclusions there again are not surprising. All rise with income, but less than proportionately. The least regressive is the tax on alcohol; the most regressive is the tax on cigarettes.

Table 5 presents estimates of the distribution of the estate tax necessary to raise \$5 billion. It is progressive, but it is a staggering 21 percent of affected estates.

Finally, table 6 is a word table and summarizes the strengths and weaknesses of all eight of the revenue sources by the four major evaluative criteria.

It is at this point that the bite-sized chunk approach to analyzing the medicare problem begins to be most troublesome to me. Three examples will illustrate the problem.

First, take the value added tax. Tables 1, 2, and 3 indicate that is regressive. But that conclusion is misleading on several grounds. First of all, European experience indicates that its regressivity can be largely eliminated by differential rates on luxuries and necessities. To be sure you pay a high price on administrative complexity, but the issue of regressivity can be short-circuited. Furthermore, the VAT can be part of a progressive tax package, as it was in Margaret Thatcher's first tax reform bill. The value-added tax increase was combined with income tax changes that had the effect of being a progressive change for most taxpayers. In the United States, the VAT could be used, for example, to free low-bracket families from the personal income tax, to increase the earned income tax, as well as to produce additional revenue.

The problem is, one is diverted from thinking about these possibilities, if one approaches the value added tax solely as a possible fix for the medicare system. The point surely is that the introduction of a VAT should be considered within the broad context of revenue needs and tax structure. The same can be said for changes in estate and gift taxes.

Second, consider selective excises. Should the supposition that they are regressive have any material bearing on whether we impose them? Should they be linked to Medicare?

The answer to both questions, I think, is no. Increased taxes on alcohol and tobacco are justified as mechanisms for internalizing some of the costs from which our methods of pricing third party coverage inevitably protect people.

They may be regressive, but if that condition is controlling, why not go further and perhaps we should have a special income tax concession for smokers and drinkers because their habits reduce their ability to pay. That is silly. I think the contrary argument is too.

The point surely is that we should take such public steps as we think appropriate to influence the distribution of income. We should then consider on their own merits taxes that are intended to make people recognize and pay for the burdens their actions impose on others.

Once again, one is diverted from putting these issues in full context if one confronts them in the constricting framework of the medicare financing problem.

Finally, there is the supplementary health insurance tax. I believe that the Internal Revenue Code is a great untapped resource as an instrument for conscious regulation of health care. The President this year suggested a cap on the allowable exclusion from the personal income tax of health insurance premiums purchased by employers. But most changes in health insurance from the reduction of first dollar coverage to the use of fee schedules or other changes in reimbursement could be encouraged, if not compelled outright, by use of the Internal Revenue Code.

We should think carefully about whether and how to use the Internal Revenue Code as an instrument of health policy. Until we have done so, we should not use it for the small contribution it could make to closing the medicare deficit.

Having said that, however, I would like to suggest that any tax reform agenda, whether it is that of a person who wants to see a comprehensive income tax, or that who wants to move to a personal consumption tax would have to include in personal income all premiums paid for by employers. This is a reform of the tax system on which, from a tax reform standpoint, virtually all students of the tax system could agree.

Finally, let me add a few words that go back to the general theme I wanted to strike. The inexorable drive of technology, rising incomes, and an aging population are causing all health expenditures to rise. It is paradoxical that we rejoice at similar trends in rising expenditures if we devote them to computers or to other technological miracles. But we grow restive at rising health care costs because these outlays do not meet a market test, and because we suspect that increasing sums are being spent at the margin for meager benefits.

The medicare system presents us with this problem in technical or because legislated tax rates happen to be flat, and because the numbers of medically costly over-75-year-olds are rising very fast.

To be sure, we can fix medicare. We can curtail covered services. We can have cost sharing. We can rely on one or more of the taxes that Long and Smeeding examine, but if that is all we have done, we will have done little.

We will have shifted the accounts where the outlays appear and marginally changed the income distribution, but we should and are already doing more. DRG's have been put in place. I have real qualms about many aspects of DRG's, some of them relating to the technology discussion that we had earlier. Several States have gone

further and are implementing hospital budget limits, some of which, as in the case of New York and Massachusetts, are really quite severe.

If these limits spread, and I think they are likely to do so, a whole range of changes will be set in motion, forcing administrators and providers to decide which care should not be offered, and compelling patients to adjust to queues and to nonprovision.

If such limits become common and our tax laws are modified to discourage overinsurance, we should recognize that the price of medicare is then the price of health coverage for the aged commensurate with that available for the nonaged. If we wish to retain the self-financing character of part A of medicare, it seems to me in that environment the case for increased payroll taxes would be strong because politically we have become accustomed to their being earmarked to the social security medicare system.

If we want to continue the joint financing of part B, then it seems to me there is a good case for increasing premiums and general revenue contributions, provided the increase occurs within that environment of general limits applied to health care system. But I can see no case for the use of major new earmarked taxes until or unless they are considered as elements of an overall tax structure adequate to pay for the expenditures which our political process deems to be necessary.

Mr. SALMON. Thank you, Henry.

We will now go on to the authors to give them a chance to respond, and also, apparently, to add to their paper.

Mr. LONO. We are grateful to Henry Aaron for some careful comments in setting out a much broader perspective on the issues at hand, something he does with skill.

There certainly are many more general domestic and tax policy issues to be dealt with than we managed to address in this small paper, and perhaps it is regrettable that the trust funds force us to focus on such a much narrower issue as the health costs of a particular population.

On the other hand, the HI trust fund problem is a pretty large bite-sized piece, or maybe it is a tough lump to swallow.

Certainly what we have to proceed with, so our further remarks will be limited to that kind of issue, the trust fund issues. These comments will largely elaborate on a chosen financing package, part 5 of our paper.

We have very little disagreement with the things Henry Aaron has raised outside the paper. In keeping with the way business is handled frequently in these quarters, because of our travel schedules, we went all the way down to the 11th hour to reach our own compromise on what this one financing package would be, and that is why unfortunately it doesn't appear in the document that was distributed.

Now, as Karen Davis has raised, the amount we have to finance depends very heavily on the assumptions you make of how severe reimbursement controls are, so we won't talk about particular revenue amounts. You are looking at this \$90 billion amount if hospital controls are severe, or you are looking at zero if you follow the Vladeck proposal of yesterday, market basket of minus 1.5.

At any rate, we won't talk about particular amounts, but instead a mixture of sources that strike us as reasonable. Before we jump into that, just a couple of small clarifications.

Indeed, Henry is right. The institutionalized are not in our estimates. All of this assumptions about distribution mechanisms are correct, with the exception that general revenues were distributed not only in accord with income taxes, but in accord with corporate taxes, assuming a property income burden, and excise taxes to consumption, so the general revenue operator in our tables is a more complex mix of general revenues.

The supplementary insurance assumptions buried beneath the estimates follow health interview survey data on which medicare beneficiaries had supplementary insurance.

Those are details.

Turning to the proposed package, we decided to split it up between the two of us. I will talk about burdens on beneficiaries. Tim will take the sources that apply to general taxpayers. Those aren't our preferred sources necessarily, but it is a convenient way to divide the burdens.

We are proposing up to half of the burden be applied to taxes on beneficiaries, and at least the others have on general sources. For the beneficiary sources, the general argument we can make for why beneficiaries ought to share some increased burdens, as the trust funds run into more and more trouble, goes like this.

First of all, beneficiaries have been bearing a smaller and smaller share of program costs, as the program has evolved since its original design, and that is primarily because of the indexing of the SMI premium.

We would like to reverse that. Increasing health care costs as a share of GNP are something that everyone is enjoying benefits from, including the elderly, and it is reasonable to look to some benefit taxes.

They are certainly sharing in those rising benefits as a share of national income. With a rising dependency ratio, it certainly makes sense to think about some of the national tax increases applying to beneficiaries rather than that relatively smaller working population as we go out in time.

Finally, as it has been pointed out, since the program was designed, the income of the elderly relative to the nonelderly in society has increased substantially.

With that background on why beneficiaries might be asked to bear some larger share of the burden, we would like to propose that beneficiary taxes be split into two sources: First, a tax on medigap or supplementary insurance. Here, the basic rationale is that the program was designed with a particular amount of cost sharing in mind, and that involved expectations about people's utilization behavior, and the implications for program costs.

The effect of supplementary insurance, however, is to increase use, and that leads to spillover costs back to the program as people who supplement use higher amounts of services.

We are suggesting that it is reasonable to design taxes to recapture for the program the extra costs that are implied by that excessive use.

Now, if the consumer wishes to avoid that extra tax, it is simply a matter of not buying supplementary insurance. If one does buy, then one must pay the extra freight. While there is some progressivity in that as revealed in our tables or at least some increase with income, it is not the income-related nature of that that interests us.

It is benefits taxation that interests us.

The second principal beneficiary payment we recommend would be simply an increase in premiums, that is national premiums, not income-related premiums, gain on benefit taxation grounds.

The medicaid program subsidizes the lowest income, 10 to 15 percent of the elderly. That is a general revenue financing device. They are exempted from that premium effectively, but on balance, we think it is reasonable and good economics to continue with direct payments.

That is the beneficiary portion. Tim is going to take the burdens on the nonelderly.

Mr. SMEEDING. Thank you, Steve. I would like to couch my comment, I think, in the restaurant analogy with which Henry began, and herein to lay down the context of our paper, Steve and I are the waiters. We are supposed to set the table. That is our role here, and we are presenting a menu that has got a number of dishes on it.

Now, none of these dishes taste good, but the first point I am going to make in a minute is we have to eat. We are going to have to have some tax increases to pay for medicare. Now, a couple of them I will admit, Henry, are exotic. This estate tax is not what I would expect you to pick for dinner.

Now, having set the table, Steve and I will decide what we want for our medicare dish. I can preface this by saying Steve did the entree, and I am going to do the dessert, and for dessert we are going to have cognac and cigarettes.

Now, Karen picked her dish. We are going to have goulash. Henry picked his dish, good old roast beef and mashed potatoes; that is, more payroll taxes. I have eaten a lot of roast beef, that is, payroll taxes, in my day, and I am going to eat a lot more before I retire, thanks to a number of my distinguished colleagues here, and I don't want to eat any more of it.

I would like a little change. Now, other distinguished people I know at this table are going to pick their menus too, in a minute, and that is fine. That is what this session is supposed to be about.

And over time, Henry is absolutely right. Others are going to debate the extent of behavioral change, life cycle effects, evaluate the dishes and maybe even change the menu.

Then, finally, Congress is going to do a Phyllis Richman, review the restaurant and pick the best dish. None of us will like it, but they are going to pick the dish.

With that as a brief overview, I just have a few comments that follow. Yesterday, Bob Derzon wanted a certain environment for health care providers. I think there are only two things that are certain. That is death and taxes.

This morning, we talked about death or at least as Lewis Thomas likes to write about in "Lives of a Cell," about halfway technology and dying expensively.

I don't think we talked enough about that this morning. I think we are going to die more expensively in the future, and that is going to put a bigger demand on medicare. By the way, this has a little bit to do with the fact that I come from Utah, the land of spare hearts and other parts, and I have seen some of the checks that the private for-profit health sector has sent to underwrite the spare parts industry, and those guys are smart guys.

They invest in the right places. If that is right, we are going to have plastic hearts paid for by medicare in a short time.

Now, based on this death argument, I think taxes are for sure going to rise. I agree with Henry that we must discover the reality of a budget constraint, but all of the DRG's, the cost sharing, everything we talked about yesterday isn't going to do enough fast enough in my opinion to avoid some need for a tax increase and I know that Steve agrees.

So what is my half of the menu? Well, my half of the menu is health taxes. I think this half should be funded out of ad valorem taxes, at least on alcohol and cigarettes, and I want to explain why just briefly.

I agree completely with Henry. The regressivity is secondary in this case to the idea of a benefit tax. The idea, in fact the title I proposed for this paper when I sent in my abstract, was "Health Taxes, Sin Now, CCU Later," and that in effect is what we are saying.

If you consume more alcohol, smoke more cigarettes now, fine. All that money is going to be salted away and some day, when you need it in the CCU on the way out, if in fact you get to medicare, it will be there. I think in fact that health taxes are good health economics in particular, and good preventive health care in general.

I hope that behavioral changes will occur from these taxes. But they will take a long time if they do work at all. Finally, I agree with Henry, cigarettes and alcohol are undertaxed now. What I disagree with, Henry, is about earmarking. The hallmark of a benefit tax is trying to find some goods or service which in fact are complementary to the goods for services being provided, so for the same reason gasoline taxes are earmarked for fixing up highways, booze and cigarette taxes should be earmarked for paying health care bills and put into the medicare trust fund for that purpose. If you die before medicare gets there, that is, before you qualify, a different issue arises. I will talk about that later.

Is there going to be enough money? The trouble with these taxes is people keep saying they are very limited revenue sources. That is wrong. They are not very limited revenue sources.

In 1975, we needed to raise \$5 billion, which was 42 percent of HI outlays in that year. If we raised the whole thing entirely from taxes on alcohol, the prices of alcoholic beverages would rise 28 percent; if we did it all from cigarettes, 44 percent. But if we did one-half each, if we split the whole burden between the two, we are looking at 14 and 22 percent; and then if we split it again to cover the dessert half that goes with Steve's entree, we are talking about 7 to 10 percent. These are not terribly large taxes.

Now, you might say that in 1990 we are going to need more money because medicare outlays are going to be growing a lot faster than these tax bases. I hope so, anyway. Maybe that is true,

but on the other hand we may not need 42 percent of HI outlays by 1990 or 1995. In other words, it may be much less, in the neighborhood of 20 or 25 percent shortages in the HI trust fund. So what I am saying is I think a 10 to 20 percent ad valorem tax, ad valorem so we don't distort the relative prices of various alcoholic beverages or use of tobacco, is reasonable.

Now, in general I think we agree with Henry. His general comment that the outcome will depend on the general budgetary situation at the time, whether we are looking at the big deficit or just the medicare deficit is correct. But we still have to get into specifics. We still should consider revenue alternatives. Now, the health cap component for employer contributions is a good idea, I agree, but that isn't going to help medicare much at all, because it is not going to increase the taxable base by very much. And in fact if we get more pension benefits instead of more health insurance, it is not going to increase that tax base at all. Neither would be subject to payroll taxation.

I agree on general grounds. I think it is good health policy to tax, that is to put a cap, and a fairly low one, on employer contributions to health care. I just think that this policy isn't going to help medicare much.

The last thing has to do with the payroll tax. I prefer not. Does anybody want to take odds on whether anyone else among the panel disagrees with me here or not?

I think payroll taxes are regressive over the life cycle. I think there is going to be a lot of pressure on the payroll tax to fund OASI benefits, the other parts of social security over the next 30 or 40 years. They are inflationary in the short run or they reduce the demand for labor, they distort the relative price of labor and capital, et cetera. I think I am going to see enough payroll taxes in my diet for the future to not want to put anymore pressure on them for medicare.

The last thing I can talk about is my exotic lein tax, which I think is kind of an interesting idea, attractive, and worth considering, given all the wealthy elderly we've got out there. It's a semi-painless tax as well. But I know everyone else at the table probably disagrees with me, so I will just let the estate tax go and if anyone wants to bring that up later we can pursue it then.

Mr. SALMON. While Tim was discussing his dessert, it was very interesting watching the reaction of the representatives of the distilled spirits industry and the tobacco industry in the audience. Three people fell off their chairs in the back there.

Mr. SMEEDING. I can be bribed. I drink John Jameson.

Mr. SALMON. I would like to introduce our distinguished group of discussants and ask them to focus on the comments made by the authors and commentators. Since we have people who worked on the 1983 social security bill, they could focus their comments also on what we have learned from the social security experience.

Also, since we have a lot of real world practical people who have been up and down the social security financing mountain, I hope we can focus on what is practical in the world we are going to live in, in this room where the decisions will eventually be made.

Third, I would hope that the discussants could focus on the other issues, the competing revenue demands that are going to be made

upon the Congress and the Government in terms of our overall deficit situation, and how the medicare financing issue fits in that competition. I hope before we end—and we are running a little bit late today—we should try to get some focus on the “means-testing” and “income-related” issue, particularly in light of what was done this year in social security.

There weren't too many people who would have sat in this room 12 months ago and said we were going to tax social security benefits above certain levels. Well, with that done and that behind us, I would have to disagree with Karen that there is any such thing as a “dead horse” in this race. Anything is on the table. It is all what is doable; what is good policy and what is practical. And with that I would like to introduce our discussants and hope that they can react to what has gone on.

First, on our far left is Wilbur Cohen, who is currently with the University of Texas, a former Secretary of HEW, and I know the person my chairman regards as the conscience of our committee on the subject of social security.

Next we have Randy Weiss, who is an economist for the Joint Committee on Taxation who has a good view not only from the payroll tax perspective but of the overall income side.

Next is Emil Sunley, who is currently with Deloitte, Haskins & Sells, who was the Deputy Assistant Secretary of Treasury for Tax Analysis in the Carter administration.

Next to him we have Bob Myers, who is presently professor emeritus at Temple University but who has worked very closely with the Committee on Ways and Means over the years on all social security issues, and I know he has his views and speaks them quite strongly.

On our right, Bob Ball, former Commissioner of Social Security and a very, very active force on the social security bill last spring.

To his right, Bill Fullerton, currently a principal with Health Policy Alternatives, Inc., but for many years was the main health staffer for the Committee on Ways and Means, and before that with the Library of Congress.

Finally, to our far right, we have Larry Lewin of Lewin & Associates.

First I would like to open up to any of the discussants who would like to make comments on what we have heard during the last hour.

Mr. BALL. I will be glad to do that.

Mr. SALMON. Go ahead.

Mr. BALL. I will be glad to start out, because I find so much that I agree with, even when it seems contradictory. I did want to say I liked the papers very much, but I really thought that Karen Davis's comments were even better than her paper, because the way I heard it, she talked herself out of the need for her proposal. In effect, I think she said if we hold to present policy, and solve for 1995—which I think is enough, let's solve for 1995, not 2055 or something—in reimbursement in hospitals, market basket plus one, you are after about \$90 billion, not \$300 or \$400 billion as has been reported.

Then I heard Karen say in effect that there are savings to be made in physician reimbursement. Let's provide for mandatory as-

signment and then we can control physician fees somewhat, without hurting beneficiaries. And this is all in the context, I believe she was saying, of an all-payor plan, not just medicare, but an all-payor plan.

Then she was willing to consider, at least, something that has gotten a lot of attention at this conference—increases in the alcohol and tobacco tax, with dedication to medicare. I think I am getting pretty close to zero. Then I would be glad to add a tax on medigap policies to the extent that they have induced extra costs for medicare. Then I will say if there is a deficit left, and I doubt if there is, then I do like the proposal, when having combined A and B, of having an income-related tax. To my mind this has nothing to do at all with a means test since it is on the income side and not on the benefit side. Payroll taxes are income-related but the programs they support are not means-tested.

But I would apply the income-related tax to all income tax payers, not just the elderly. The reason I like that so much is it seems to me a beginning for not solving only medicare's problem but a way of financing a national health plan for everyone when we get back to that agenda.

Mr. SALMON. We have got to be careful here before we wish away the entire problem. I think there are some people who might disagree that market basket plus one can hold through 1995. There are some, I think, that might want to look beyond the \$95 billion here.

Emil, you were concerned earlier that there was a lot of talk going on in the room about medicare in the last 2 days, but wondered, when this conference was over, how the medicare issue is going to fit into the other demands. Do you want to shed some light on that, given the other revenue problems we have?

Mr. SUNLEY. Thank you, John. Henry Aaron's initial comments very closely parallel my own concerns. The driving force for the next couple of years is the overall budget deficit. There clearly will be substantial pressure to reduce spending, and medicare is at least one place Congress is going to look for spending reductions.

Congress also is going to need, I believe most people recognize, to raise additional Federal revenue probably equal to 1 or 2 percent of GNP. That will be a driving force on the tax side. But it will not necessarily be a force to raise specific tax revenue for the medicare trust funds. Until the HI trust fund goes south in the late 1980's, I believe there will not be pressure to raise the payroll tax. There may be some need to raise medicare premiums possibly to avoid reductions in part B of medicare, but I don't see the tax issue being closely driven with the medicare issue until we take care of the overall budget deficit.

If I may, John, make one comment relating to the alcohol and tobacco taxes. As you know, Randy and I were included on this panel not because we are members of the health care fraternity, but because we are part of the tax policy fraternity. One of the basic premises of the tax policy fraternity is that death and taxes are inevitable, except death doesn't get worse every time the Ways and Means Committee meets. What I have learned in the last 2 days is that death also may get worse every time the Ways and Means Committee meets.

One area of my own expertise is excise taxes, and let me comment just briefly on alcohol and tobacco taxes, specifically the alcohol tax.

As most of you know, the advisory council on social security has tentatively voted—I believe the vote was 7 to 6—that these taxes should be increased, if additional revenues are needed.

Now, the council did not indicate just how these taxes should be increased. The second paper today suggests an ad valorem approach to increasing these taxes, but there are a lot of difficulties to this approach.

Reserving for a moment on the issue of whether these taxes should be increased, if they are going to be increased, what I would like to indicate is that there are some difficult issues that have to be faced.

Currently the Federal excise taxes are not ad valorem taxes; that is to say, they are taxes based on the quantity of output, not the value of the output.

The rates of tax vary widely. With respect to distilled spirits, the tax is \$10.50 per proof gallon.

With respect to what we call still wine, the typical wine you buy in a store, the tax is 17 cents per liquid gallon.

Now, if your concern is to tax alcohol content or buzz, because there is a health-related problem, then you need to increase substantially the tax on wine from something like 17 cents a gallon to \$2.52 a gallon just to make it equal to the tax currently on distilled liquor. There is also a similar substantial increase required in the tax on beer.

Now, traditionally the lower rates of tax on beer and wine have been justified in part that these were the drinks of moderation or the drinks of the working class. But it is not going to be possible, it seems to me, to defend a proposal simply to double alcohol taxes.

The wine industry ought to favor this proposal. They will gladly pay 17 cents more a gallon if the distilled spirits industry has to pay \$10.50 a proof gallon. They will count on the cross elasticities to help them out, and not worry about the tax increase that would fall on still wine.

The first issue in addressing alcohol taxes is to determine what should be the relative tax on beer, wine, and hard liquor. I don't know of any economic literature that I have ever seen from the health care fraternity that indicates that distilled liquor is a more serious health problem per unit of alcohol than beer or wine, though there may indeed be some literature in that area.

Mr. SALMON. There is some literature in the Congress. It is called the New York delegation and the California delegation.

Now, if we get wine produced in Utah and Wyoming, we would be in better shape.

Mr. SUNLEY. I can recall a certain amendment relating to wine in the Trade Act of 1977 where the administration lost by one vote in the Ways and Means Committee.

Also it isn't at all clear that you want to go to ad valorem taxes.

Ad valorem taxes are more difficult to administer. Specific excises are easy. It is possible to have a specific excise tax on quantity, but adjust the tax rate from time to time as inflation occurs. It seems to me that there is no reason for having a higher tax on the

more expensive brands of distilled liquor compared to the less expensive brands.

If health considerations are the driving force behind increased alcohol taxes, then it seems to me that the tax should depend on the amount of alcohol, the amount of buzz. If you took our current alcohol taxes and converted them into ad valorem taxes, the tax on distilled spirits would be 30 percent, the tax on wine would be roughly 2 percent, and the tax on beer would be 12 percent, which once again indicates the wide disparities that now exist, and that should be sorted out if we are going to talk about increasing the importance of this revenue source, which currently raises something like \$6 billion of Federal revenue.

Mr. SALMON. Bob Myers.

Mr. MYERS. As to the financing of HI and SMI, I am a status quoer. I think that the present system of financing has worked reasonably well over the years, and I see no reason to fix it now. If we were starting all over again, perhaps it should be different.

I am opposed to combining the two trust funds in part because they are financed from different sources. If payroll taxes and general revenue financing are mixed together with premiums, it will not be possible to see where the true costs are arising. Furthermore, I think that it is much more visible if there are the two separate trust funds as to just where any financing problems are.

I am opposed very strongly to general revenues for financing the ongoing HI program. I think that general revenue financing is deceptive and irresponsible, because it hides the costs from general view.

Now, I know that the argument is often made that payroll taxes are regressive. I do not think that this is valid, because the system of benefits and payroll taxes in the HI program are, on balance, very progressive.

I am also very skeptical about any measurements that are made as to what the incidence of various types of taxes will be, based on simulations and econometric models. I think that any new tax that is put in can well result in changes in the income strategy of individuals, so that any results that might be obtained from looking at the status quo or even trying to predict changes in the status quo are not reliable.

I think that SMI premiums should be uniform and not income related. First, there are great differences in measuring what income will be used.

Also, there is a great problem of lag as between income and payment of the SMI premium. Persons might have had large incomes last year, but this year, when they are paying the premium, they may not have that income any more. Also, this raises the question as to why not consider assets as well as income?

I think that having nonuniform premiums is unfair to middle- and lower-income persons because of the stigma of paying lower premiums for the same benefit protection as higher-income persons have. It is just as though all prices depended on people's incomes. I think that would be a poor system and would be demeaning to people.

This procedure is not followed for other products. Why should it be done for the SMI premium rate? If people need money to pur-

chase things, including SMI, the money should be provided to them under one program all at one time, like the SSI program or through the OASDI benefits.

Now, as to one specific comment on the Long-Smeeding paper, they mentioned in passing that interest on the trust funds is general revenue financing. I abhor, as I have noted, general revenue financing, but I do not consider that interest on the trust fund investments is general revenue financing any more than I consider that the employer contributions for Federal employees who are covered under OASDI and HI is general revenue financing. Those are employer payments.

Further, they mention that the 1983 act did have several methods of subsidizing OASDI from general revenues. There were, in my opinion, unfortunately two such methods, but there were not more than two. These two were: (a) just a one-shot occurrence of the 1984 makeup for the employee tax rate not rising, and (b) in the long run, the income taxation of social security benefits and putting the proceeds back in the trust funds.

Those, I think, are the only two general revenue financing procedures present as a result of the 1981 amendments.

Also, I would like to discuss very quickly one thing that has been mentioned here, what I call the 45-percent fallacy—namely, that medicare meets only 45 percent of the health costs of the aged. The reason that figure is so low is because it includes the roughly 25 percent of so-called health-cost expenditures that are custodial nursing home care. Most of that is maintenance expense. It is not a medical cost. If that were not considered a medical cost, the 45-percent figure would probably be somewhat more like 60 percent.

Finally, I am very lukewarm on using taxes on tobacco and alcohol as a means of financing medicare. It is an unpredictable source of financing. Desirably higher taxes might be levied on these products, but they should go into the general fund. Further, if you are taxing such State goodies as tobacco and alcohol, why not tax other goodies that are also bad for people such as any products made out of sugar?

Mr. SALMON. Mr. Lewin.

Mr. LEWIN. Thank you. I think Dr. Davis' proposal makes some very important contributions, particularly some of the restructuring issues. Since you have cast me in the role of speaking on behalf of the private sector, one of the concerns that I have about all of these approaches is that we need to distinguish between restructuring to improve equity on the one hand, and Karen and Diane have made some strong arguments for their proposals, and refinancing to bring more money into the system, on the other.

What concerns me, and I believe would concern many private purchasers, businessmen and other large employers who are purchasing care, is a willingness to pump more money into the social security system without first solving the kinds of problems that were discussed yesterday.

I am not necessarily embracing proposals, yesterday's proposals or any specific proposals, but it seems to me that a serious concern about the efficiency of the system and the incentives that are built into it would be threatened if the financing problems were solved too easily. By creating new sources of revenue without first deter-

mining how to constrain them and without having some sense as a matter of national priority as to what the level of expenditures should be, could reduce the political will to take on some of the cost containment issues in medicare with a similar effect on the rest of health care costs.

The other problem that I have, and it is not so much a criticism of Karen and Diane's paper, because they admittedly were dealing with a narrower definition, is that their approach doesn't address the problem of other expenditures for the elderly such as long-term care and the broader range of issues faced by State and local government in providing social and medical services for the elderly and SSI populations.

We can talk about Federal deficits, but we in Washington, too easily, I think, overlook the deficit problems and the taxpayer revolt issues at the State and local levels. The current medicare fiduciary structure creates some very funny incentives as between medicare and medicaid with respect to the financing. Health care for the elderly, and I think those issues at some point need to be thought through.

If we solve the 1995 fiscal problem, it is not terribly likely that we will deal with them, but I would hope there would be enough policy perspective concern about the State budgets and their picking up the rest of the burden for the elderly.

Two brief points that I want to comment on about the Davis-Rowland proposal. It seems to me that they have, by establishing their income-tested premium, not only attempted to solve some of the equity problems. If we are going to put further constraints on the system, those equity problems really need to be solved.

Otherwise, the pressure will be accelerated on those least able to pay.

By tying the premium tax, particularly options 3 and 4, it becomes a function of the wealth of the elderly as opposed to—which I presume is going at as great a rate as the payroll tax generally.

Second, it creates some interesting incentives for the other problem, which is the ability to maintain home and community-based incentives.

The point in the paper, one of the problems in determining what the income base should be for purposes of determining a premium, what happens if an elderly person is living with a younger family?

By dealing with the premium there are all kinds of opportunities to build in those kinds of incentives. Moving to a solution to easily allow us to solve the problem with a financing level without solving it at the efficiency level.

Mr. SALMON. Mr. Cohen.

Mr. COHEN. First, I would like to explain my bias, because I think you cannot discuss social security, medicare, and medicaid without having a very distinctive bias as many of the other people have here. I was originally trained as an economist, but I found after working with the Ways and Means Committee for 30 years or so, that economics was not the sole basis upon which the Committee on Ways and Means made its decision.

I have never been in an executive session of the Ways and Means Committee when they made any decision on horizontal or vertical equity. I have never heard it discussed in the executive committee.

Second, my experience has been that when I make a speech to various groups of aged people about the programs, I have never found a low-income group who ever asked me, are the payroll taxes regressive?

As a matter of fact, one of the questions I usually get from this group is, why didn't you deduct more payroll taxes when we were working so our benefits would be better?

These kinds of experiences led me to believe that the economic questions that are involved which we are discussing today are really subordinate questions, but certainly relevant, and I am glad to be a participant to present some considerations which go beyond economics.

As a professor, I will take it back to my students and explain to them how irrelevant these questions are.

I am a professor of public policy and I have discovered that public policy is an amalgam of a lot of different questions.

I will tell you the problem: 60 to 80 percent of the older people vote, and only 25 to 50 percent of the younger people vote.

Now, that has a very important bearing on decisions in this room where I have spent 25 years in connection with these questions, so I am somewhat sympathetic with Bob Myers' point, which is if you don't have to change something very fundamentally, why do it? People have become accustomed to whatever the rationale of the present program is, and to institute a whole new basis of dealing with the program makes people very unsure, not only about the medicare and social security system, but also about Congress commitments that it has made in the past.

That is where my bias comes in, and I want to explain it. I think when 22 different Congresses have made commitments on social security and over 5 Congresses on medicare and medicaid changing the terms and conditions primarily for budget considerations undermines people's confidence in the integrity of their elected representatives.

I would be very hesitant about making any major changes in the program unless they were absolutely necessary. However, the first thing that I would do is to take hospital insurance out of the Federal unified budget.

When Mr. Sunley and others talk about trying to fix up medicare to help the Federal unified budget system, that completely undermines people's confidence in the medicare program.

You try to find an 82-year-old lady who understands why you cut social security or medicare in order to help the unified budget. I ask any one of you to do it, and I have asked that of all of the members of the Ways and Means Committee.

It is impossible. They cannot understand it and they never will understand it.

Now, I believe that, contrary to Bob Myers, we did put general revenue into part B, and I was a participant in that important decision in 1965. I negotiated that policy approval with President Johnson. I think it was a very, very important policy decision.

Nothing has happened since 1965 that has undermined the confidence of people in part B of medicare, because of the presence of some general revenues.

The program has not been disasterously cut because of it, or for any reason related to that. The American people have accepted general revenues in part B. So have the political leaders. I see no reason why you can't apply the same principle to the hospitalization insurance; that is, to finance part of it out of general revenues.

I would combine parts A and B as has been suggested, and have the general revenues apply across the board. But quite frankly, I would not go beyond a third to 40 or 50 percent of the total costs. I want to see the payroll taxes be an important part of the financing of this program, because that substantiates the moral and political commitment that people have made to pay for part of this program. Despite what the economists think about it, that was the leading reason why, among other factors, we were able so successfully to defeat President Reagan's 12 cutbacks in social security that he made in 1981, that since people helped pay for the program, it shouldn't be cut for budget purposes.

You can argue all day long that they didn't pay the full cost, but the political importance of payroll tax collections to the program, to preserve its financial integrity is an absolutely essential point. I wish to see it continued because I don't want to see politicians cutting the benefits in this program every time a President wants to balance the budget, because he won't raise taxes. So I believe that there is a sound basis for continuing what we have. But quite frankly, I would just have line 37 in the income tax, a very simple line after the exemptions and put a flat tax on total adjusted gross income, minus the exemptions, and make it high enough to pay whatever the residual difference of the medicare financing needs are going to be.

And we could explain that to the American people. How would I explain it? When you were born and later when you go to work, you don't know how sick you are going to be or how long you will live, or what your disability is going to be, what your hospital insurance or medical insurance or physicians' costs are going to be. A flat tax on everyone, I would prefer a progressive tax, no question about it, but Bob Myers makes some relevant objections to that, but I would accept even a flat tax that everyone would pay, because you do not know the probability of the risk of your getting sick and whether you will draw \$100,000 out of the medicare system or zero.

And therefore, agreeing with Bob, everyone ought to pay, because you don't know what the risk is, and you don't know what the ultimate liability is that you will bring on the system.

My other bias is this: I am absolutely opposed to any increase in the cost sharing in this program. As a matter of fact, I very reluctantly went along when we initiated it. I would have hoped by this time we would have reduced the cost sharing.

I would hope eventually we would eliminate cost sharing completely. I don't think that is probably feasible, but I would be absolutely adamant about increasing it.

There are 15 to 25 percent of these aged people who are poor. Nobody has proposed a solution to how to really effectively deal with the medically poor, and I do not think that one should make a policy change in this program that will put a greater burden on

the poor without putting a very substantially increased cost on those who are wealthy.

I happen to disagree with Karen about having an income-related medicaid premium, but again, I agree with my other colleagues. I don't think that her proposal is means testing.

I will say how I define means testing. To really have a means-tested program, you not only have an income test, but you have to have a resources test. That is what means testing has meant since the Elizabethian poor law of 1601. She doesn't have a "means" test in her medicaid premium because it doesn't relate to assets.

She has an income test. We ought to be quite clear in talking about it, and I agree with Bob Ball. I have been booed by audiences because I supported the partial taxation of social security benefits, because people do believe it is means testing.

When you get outside of this room into the hinterlands where most people live, you will find that they have a quite different view than we have in this room.

They believe taxation of benefits is means testing, and that is part of the problem, not what the economists and I believe, but what a very substantial proportion of the people believe.

I want to say this, and I am not 100 percent convinced of it, but the only way we are going to solve this financing and interrelated problems is to have a National Commission on Medicare Financing Reform. Why?

You have to bring the parties that are involved together. You cannot decide the financing problem in this room by the people who are here. It has to be decided by bringing the hospitals, the physicians, the nurses, the contributors, and the older people together in some kind of a political, policy solution.

It is a political question, not solely an economic question. This is a political question, not in the pejorative sense of the word, but in the public policy sense of the word. People are concerned about their health and medical care and they would be willing, in my opinion, if they were informed, to pay an earmarked income tax to help finance the medicare system, and therefore, you need a political mechanism in which the President and the Speaker and the other political people will put their back to a solution on the financing that does not cut benefits, and also takes the program out of the unified budget, and simplifies the system.

One more point, while I had something to do with the medicare system as presently constituted, and I think it ought to be retained in its pristine purity, but I do think it is subject to administrative reform and ought to be administratively reformed.

Because I have been a beneficiary for 5 years, I know how very complicated I made it. It is too complicated.

It is too complicated and it ought to be simplified. The coinsurance and deductibles ought to be reduced or eliminated. There ought to be mandatory assignment, and I would trade with the AMA. I will give up the temporary freezing of the doctor's charges, which are not that important in the system. It is not the doctor's charges that are so important but the fact that the doctor determines all the hospitalization services of the individual, not merely his services.

If we are going to get the AMA to cooperate, they must sit down in a closed room with the senior citizens of this country and bargain. There are more senior citizens than there are physicians in the United States, and I learned that very early.

I would like to say to Henry Aaron, for there are more senior citizens than economists also, but being very serious, the public policy decision on this interrelates economics with emotion and with great ideological difficulties.

One problem that only has been mentioned here, the most serious long-run financial problem of medicare is terminal illness, not the technology part that you have been talking about, the Judeo-Christian emotional aspect of decisionmaking of a moral, ethical character in relation to terminal illness. Nobody has solved that question.

Until we resolve that question, and I don't know how to resolve it, but until you resolve the terminal illness question, medicare costs are going to rise, rise, rise, and all this business about DRG's and mandatory assignment and physician's fees, they are only little pips on the big problem, because terminal illness is taking the biggest share of medicare costs, rising with the demographic aspects of our population and until you resolve that, I would keep the system as close to its original construction, although I would go along with adding some kind of additional financing and I would hope it would be an earmarked income tax but I would be willing to consider other proposals, as long as you did not cut the present benefits.

Mr. SALMON. I would really like at this time to apologize for our panel. It seems we could not put together a panel where anyone had any strongly held opinions.

The Ways and Means tax bill, reported out of the committee last month, will be considered probably in February or March. At that time, we will have a very healthy discussion of mandatory assignment and the freeze.

We have had a lot of different opinions here, people expressing their views on what should happen. We have also had reference to how the Ways and Means Committee does and does not make decisions. So I will turn to Bill Fullerton to tell us what is going to happen, since he knows how the Committee on Ways and Means makes decisions.

Mr. FULLERTON. It looks a little bit different from up here than sitting down there over the years, and the committee is somewhat different in terms of numbers and the way it is organized.

Wilbur, as I suspected he would, brought out some of the practicalities that I was going to bring out. There is an interesting facet to Karen's proposal, which I would like to comment on.

If the next committee meeting actually adopted that proposal, I would suggest to you that at the next meeting on medicare of the Committee on Ways and Means the audience would be composed of two groups. On the right-hand side, those representing the providers, and on the left-hand side would be the aged and nobody else. Why do I say that? What she proposes is a tax, a mandatory premium. It means that all future increases in medicare, whether by increasing benefits or poor performance of the system, will be paid for entirely by the aged. The only people who will be concerned at

that point will be the aged, and they will be the only ones to lobby the Congress on medicare other than providers.

With the decreasing numbers of physicians—and we have stopped importing them to such a degree—some reduction in the number of hospital employees—hospitals are already laying off people—the ratio of voters concerned with increases in costs and increases in benefits on the one side as opposed to those who provide the services on the other will be even more unbalanced.

Probably under that kind of a system, the politics of it would be that employers, the general taxpayer, the young would stop worrying about medicare and the battleground would be fought out here between the aged and the providers.

If we are going to take up some issues like those raised by Professor Cohen, for example, the high cost of terminal illness, it may have to come from those who face it. Congress responds more quickly to the health problems of people who have faces, but not as well to people who do not.

Those reactions were true back when we added ESRD to the program and made other changes in the seventies. I see no changes in the constitution of this committee which suggest that those kinds of considerations are going to change.

I will stop there.

Mr. SALMON. Thank you, Bill.

We mentioned earlier, Bob Myers said he was against any concept of means testing the system, and we have had some discussion here today about what is and is not means testing and what is income related.

I would like to ask Randy Weiss, who was very much involved in the question of taxing social security benefits last spring, what does that mean in terms of medicare. Does that open new opportunities that were not there before March of last year?

Mr. Weiss. Thank you, John.

The proposals presented in both papers and many of the discussions here have placed considerable reliance on the income tax mechanism to raise revenues, one way or another, for medicare.

There are certain important features of the income tax, involving both the mechanics of it and the esteem in which it is held among the public, that ought to be discussed in this context; these features may lend a note of caution to the use of this mechanism in some of the ways that have been described.

First of all, I think the individual income tax is generally under stress.

The popularity of the individual income tax is among the lowest, if not the lowest, of all the major taxes that the Federal or State governments levy at this time.

There is a perception that the base of the individual income tax as presently constituted does not in many cases fairly measure ability to pay. It seems to me, therefore, that one should be cautious about keying into the existing base of the income tax and loading on a lot more freight—such as surtaxes or income-related premiums on elderly beneficiaries, and other proposals of that kind.

In fact, if one thinks about what might be the best and most politically feasible thing to do in order to raise revenues, and as Henry so well pointed out, we are not talking about raising rev-

enues for medicare but for the whole Government, some attention should be given to the public perception of which taxes individuals like to pay.

One consistent finding in public opinion surveys is that the payroll tax is more popular than the income tax. There are several reasons for this.

The payroll tax is a simple tax. You don't have to even file a tax return. It has a relatively comprehensive base; there are no stories of high-income taxpayers using legal tax shelters to avoid the payroll tax. In addition, the fact that the payroll tax is used as a basis for entitlement to the social security and medicare benefits makes people think that when they pay these taxes, they are going to get something back for their money. Finally, unlike the income tax, the payroll tax has not been cited for doing substantial damage to the economy.

Since there is a general consensus that we have to find ways to reduce the deficit, I think that we ought to be looking at ways in which the revenue level that is judged necessary can be raised in ways that are the most politically acceptable and the least economically damaging.

It may well be true that there are some distributional issues that ought to be addressed if more reliance is put on the payroll tax, but we can use other mechanisms, such as the earned income tax credit already a part of the income tax, to address those.

In addition to the perception problems which may arise if the income tax were used to implement income-related premiums, there are some specific limitations to be kept in mind.

First, the income tax mechanism provides a fairly narrow base with which to levy any type of new tax, including income related premiums on the elderly. Only half the elderly file any income tax return at all, and only about 40 percent of the elderly have any income tax liability. Thus, if we were to move away from the current system of flat premiums for the SMI program, we would be giving up some of the tax base presently used to finance this program.

The second limitation to keep in mind is that it would probably be necessary to limit such a tax to the value of the benefits a beneficiary was receiving through the program. Since the purpose of an income-related premium would be to recoup a portion of the benefit subsidy for which the individual has not paid, it would be viewed as unfair if the required premium were ever greater than the amount of the subsidy.

For example, if an income-related premium were implemented for the SMI program and the average value of the benefits not paid for through flat premiums was \$500, it would be hard to justify a surtax on beneficiaries that could be more than \$500. Since relatively few beneficiaries would pay an income-related premium of as much as \$500 and many would pay nothing at all, the average collection would be considerably less than \$500. Thus, such a mechanism would fall far short of paying for the aggregate subsidy.

Although there may be specific aspects of the income-related premium that may limit its potential for increasing medicare revenues, it is consistent with a consensus that seems to have developed on this panel, and indeed, at this conference. Most speakers

appear to believe, taking into account both benefits and taxes, that reducing the resources available to middle and upper income elderly beneficiaries is likely to be a part of the solution to the medicare problem and, thus, as Henry pointed out, to the budget deficit problem. This consensus should not be masked by disagreement about whether this should be done, for example, changing the design of benefits or premiums. In this context, there may well be some provisions in the Tax Code that we should exercise if we want to adjust the overall burden of taxes and benefits, including medicare benefits, between the elderly and nonelderly population.

Three particular provisions may be worthy of some discussion.

The first is the extra personal exemption for individuals age 65 and over. If the elderly are getting benefits from medicare or other programs, and if the view is that the typical or wealthy elderly person is in effect getting a benefit that ought to be recognized in governmental adjustments to his or her standard of living, maybe we should think about whether every elderly taxpayer should be entitled to an extra personal exemption.

A second potential proposal to broaden the income tax base is simply to include in income the value of medicare benefits themselves.

Earlier this year, Congress and the President enacted the taxation of social security benefits. Some people called it a tax. Some people called it means-testing of benefits. But whatever they called it, a consensus developed that it was an appropriate way to raise revenue from that age group and that beneficiary population. By the same logic, it could be argued that the value of medicare benefits, the portion that the individual doesn't pay for through employee payroll taxes or premiums, ought to be recognized in computing the individual's income tax liability.

The third item which ought to be noted, another substantial source of untaxed income for the elderly, is the tax-free treatment of the health benefits which many elderly retirees receive from their employers.

The tax-free nature of retirees' health plans creates a second subsidy for medigap insurance. Earlier in this conference, it was pointed out that two-thirds of medicare beneficiaries have some supplementary insurance, and that the price of that insurance is subsidized because the purchaser of that insurance does not pay the full cost of the additional benefits which the insurance company is providing. In fact, medicare pays some of that, because medicare utilization is increased when individuals are covered by such insurance.

It also should be pointed out, however, that the tax system also is subsidizing medigap, because it may well be that about half of all medigap insurance is in the form of the continuation of a health plan that a retiree had when he was working for his or her employer. Thus, the tax-free treatment of health benefits gives an incentive for employers to structure their pension plans to provide health benefits rather than taxable cash benefits; this is in addition to the subsidy which lowers below its true cost the amount which the employer must actually pay to provide such coverage for retirees. In general, then, there are areas of tax policy that affect the elderly that ought to be examined for their effects on equity

and efficiency, in addition to brand-new surtaxes on the existing income tax base.

Mr. SALMON. Jack, I know, wants to come back to the means testing issue, but since Randy revived the tax cap, which is Karen's dead horse here, I wanted to note that we have been talking about various versions of it for a long time.

Just so people will get an appreciation of what you are talking about in terms of revenue, right now all employer paid premiums are excluded not only from the income of the employee, but they also aren't even taken into the FICA base, the social security tax base. If you didn't deal with the cap because it was decided it would be bad policy or bad politics, but if you simply put health insurance premiums into the FICA base, subjected them to both employer and employee social security taxes, you are talking about picking up in excess of \$9 billion a year for the trust fund. So you are dealing with big dollars in this area, and it is an area to be examined.

Jack, do you want to talk about means testing?

Mr. MEYER. Yes, a comment or two.

No one here is suggesting—I am certainly not—the use of means testing in the sense of eligibility restrictions. What we are talking about is the notion of relating what you pay for your insurance policies, which are partly supported by the Government, to your resources. I very much agree with Mr. Cohen's suggestion that the term "resources" should be used more broadly and should not just include taxable income. As I mentioned earlier, that can be very misleading.

I tried to use terms like "ability to pay" in my talk, instead of "means testing," specifically to avoid this confusion. However, I have no apologies for the term "means testing," in the sense that I think Karen and I are both talking about it.

While I am in the process of defending Karen and Diane for a moment, let me say that I feel that they didn't talk themselves out of that proposal, as one commentator suggested. I have some qualms about their proposal, but I have even more qualms about the notion of just taking the market basket plus one, because that will get the medicare deficit down to \$93 billion. In fact, yesterday it was suggested that market basket minus one would eliminate the medicare funding problem entirely. I am waiting for the conservatives to join this fight and say we could have market basket minus six and start retiring the national debt.

I think these kinds of controls are the same sort of controls that have brought us a night in the hospital in some parts of the country that cost \$600, \$700, or \$800 a night, and I don't think they will work. Other controls in the form of DRG's have been developed to help alleviate the medicare budget problem, but I have my doubts about them, too. Some may think that by the time we have all this together the deficit will be gone. I just want to go on record as one who thinks these problems will not go away and as one who thinks we have to face some hard decisions.

We can proceed with payment system reform, but it won't define the problem away. In addition, let me just note one other point. The term "cost sharing" has been identified, and I think wrongly, with taking that 45 percent that people pay, as Karen estimated,

and raising it. It doesn't have to. I am talking about benefit redesign that develops a little more cost sharing for a day in the hospital, or a different kind of cost sharing. The other side of that coin, however, is catastrophic illness protection, and that hasn't been mentioned.

It is a trade, in fact, and in his bill, Senator Durenberger suggested that no new money be raised from this benefit redesign. He states that the benefit redesign should be done for fairness reasons, which is a distinction that Larry Lewin, I think, was trying to make. In this case, the argument concerns the fairness of requiring higher cost sharing among those who can afford it in exchange for some catastrophic illness protection, not in exchange for increased general revenues. I think it is something we should do because it is fair, even if it doesn't raise that 45 percent.

Finally, as to the risk of being booed, referred to earlier, I think that Tim Smeeding's comments were appropriate. All the tough decisions we make and options that we think of will risk us being booed. In fact, we are all up here because we get booed a lot for various things we say. What worries me is that we might be avoiding some obvious solutions and necessary changes so that a group of senior citizens won't boo us, or a group of farmers won't boo us, or a group of veterans won't boo us, and a group of civil servants won't boo us. Consequently, we will get booed for inflation and higher interest rates because we come right back to an economy that promises more than it can deliver. We have got to balance this out, and that is the whole thrust of my comments on Karen's paper.

Mr. SALMON. I think there is no decision that is made in this room that isn't booed by somebody.

Bob wanted to speak to your remarks.

Mr. BALL. I just wanted to make it clear that I want to select the people who boo me, and that is the doctors and the hospitals. I think cost control has to be the first emphasis here. I agree completely with Larry on that.

Whether it will be in itself completely successful, I am not sure we are going to know for a while. I am not saying that cost control alone is necessarily enough, but that is what I want to try first. I think we should put all the pressure in the beginning on that approach.

The DRG amendment did give the Secretary amazing power to do this. Now, it is within a political setting as to what an administration will really decide to do, but I think that is where the pressure should be. Then I would move to some revenue enhancing sources after that, and take them in a series, as I suggested earlier.

I think Randy's selection of popular taxes is exactly right, and I think the key characteristic of what makes payroll taxes popular was the last point he made—that it is a dedicated tax for a visible benefit. I think you could get the same result for an expanding national health program with a line on the income tax return. Just so I make it absolutely clear, I was for a national health plan before. I am for one now, and I think it is going to come back on the agenda. Additional coverage and expanded benefits are going to be an issue, not just whether we can pay for what we have in medicare.

Mr. SALMON. Wilbur.

Mr. COHEN. My comment has to do with this earmarked income tax. I think that if you have an earmarked income tax on line 37 of the return, that said health financing tax, that would be acceptable to most people. Now, whether it is progressive or includes an exemption is an unimportant issue. While I believe what you say is absolutely correct about the payroll tax, I think the American people would accept an earmarked income tax that was not for national defense or to collect the mail or to do something else, but to protect the medicare system.

Now, the second point I want to make—that is why I am for this National Commission on Medicare Financing Reform. If such a Commission were to recommend it, and some political leaders got behind it, I think you could get substantial support from people on it. I don't like the idea of putting more taxes on the older people when they are old. The idea behind insurance is to make people pay part of the cost while they are working.

Now, it is true under Karen's point that is going to be on higher income people, and I can't argue about that equitable or fairness argument, but it seems to me that Randy's point is very well taken. Most of the aged are not paying any or very little taxes. You would be initiating a new tax on many people, and I think that would have much more political repercussions than the flat tax or progressive tax on everyone for a health care system.

Plus I want to go along with Bob Ball. We are eventually going to have a national health care system in this country covering everyone. There is no question about it, and the DRG's and everything we are talking about are driving to that inevitable conclusion. Everything that is happening today that you are talking about on technology, on terminal illness, on demographics, on financing, is leading to having a national health care system of some sort.

If we could get a tax enacted now, that was a health care financing tax, that would help very markedly to finance a more comprehensive system, starting with childbirth through old age, and then I think we would have a health care system that would be more rational than it is today. To have DRG's just on medicare, to have a medicaid system that is blossoming, taking care of the indigent, I think the system—and I have got to say this—as many of you in this room know, I helped create it, but I would like to help reform it right now to have a more comprehensive and rational system.

Mr. SALMON. Bill.

Mr. FULLERTON. John, you asked me earlier to make some kind of prediction. I am going to make a fairly easy prediction. I think the committee is going to have to look at several sources of income.

They are going to look at beneficiary cost sharing, increased taxes, and reductions in payments to providers. They are going to look in all three directions to solve this problem, and I predict that there is going to be some balancing out of all those things as they perceive this problem.

But I think I would go along with Wilbur Cohen, to this extent at least, by saying that the people who are going to make those decisions, who really belong in these chairs, are out where it really counts right now. They are out talking to people, and if they are talking to people about what the medicare problem is, they are

probably asking for ideas as to where they think the program ought to go and how it should be paid for. I think that is probably the best way to learn. It may very well be that members of this committee will pay a lot more attention to what they are learning in their districts than they will to the proceedings of this meeting over yesterday and today.

John, as a last item, I would suggest that if you really want to have one more source of income put on the menu, you might suggest a national lottery to help solve the problem.

Mr. SALMON. Henry.

Mr. AARON. I would like to comment a bit on the point that Wilbur Cohen and Bob Ball made about the inexorable, although I must confess barely perceptible, trend toward national health insurance.

Mr. COHEN. You have got two votes here, Henry. We are up on this side of the table now.

Mr. AARON. The battle for national health insurance, which has been going on for a very long time, started off on a very different foot from the one that it is standing on now.

It started off as an equity and access argument. Most people have pretty good insurance now. There are still holes in coverage, but the argument for health insurance is no longer primarily an equity and access argument.

The argument for national health insurance now is the cost control and budgetary rationality strategy. For that reason, how one goes about dealing with the medicare problem right now is absolutely central.

If one puts in a whole bunch of controls that end up differentiating sharply the medicare system and perhaps the medicaid system from the rest of the health delivery system, one will have set back that goal of budgetary control years and perhaps made it unattainable completely.

That is one of the reasons why I argued that it is vital that the medicare problem be approached in the broader context, one in which we talk about reimbursement for all providers, not reimbursement through medicare, one in which various other restrictions would apply across the board, and not just to this program.

If we focus on this cost control road for medicare only, the other argument for a national health plan will have been undercut.

Mr. COHEN. I agree with you, Henry.

Mr. SALMON. Since we have agreement, I think we have found an appropriate place to stop. I think Karen wanted to make some comments here at the end.

Ms. DAVIS. Our job was to arrange the menu and then indicate our choices. I want to make it clear that I prefer the diet special, particularly for the physicians and the hospitals.

My friend, Mr. Fullerton, said that wouldn't be popular with the provider lobbies. I learned that at his side a few years ago. It is still the right thing to do.

In 1982 hospital costs went up 16 percent. This is a time when inflation in the economy as a whole is running 4 or 5 percent. That is the cause of the problem in medicare and it has got to be the solution. The first solution has to be to deal with rapid increases in

both hospital expenditures and physician expenditures in the medicare program.

Mr. Fullerton said that he didn't think the elderly would be too keen about a tax, an income-related premium tax that they would have to pay. That might be true, if it stood alone. I think that this package does need to be coupled with making medicare the decent health insurance package for the elderly that was envisioned when it was enacted.

That means mandatory assignment for physician services. It means a cost ceiling on out-of-pocket expenditures for the elderly for all services. I think if you did those things then you could replace the SMI premium with an earmarked medicare premium tax, even one at a higher level, and the elderly would be willing to pay that, if it means a stable, guaranteed, sound, medicare program with adequate benefits.

I don't think that tinkering with the system is enough. I think we do need to merge A and B into a single program. I think there is precedent for doing this now with the new social security financing plan. One type of an income-related premium for medicare, for example, would be taxing 50 percent of the actuarial value of medicare for those with incomes over \$25,000, the exact parallel of what was done on social security. The precise way in which it is done is not the important thing.

The important thing is to get the revenues in there to make it a sound plan, doing the other things that we need to do, but patching up alone is not enough.

It won't solve the fiscal problems in medicare.

Further, we need to reform benefits, putting a ceiling on out-of-pocket expenses of the elderly which will cost additional money. Addressing some of the inadequacies that have led to medigap purchase will cost money.

We need to take this opportunity not only to solve the immediate deficit problem looming in this program, but to make medicare a sound program that will carry us into our old age.

Mr. SALMON. Karen and Bill referred to the 1977-78 hospital cost containment experience which was an experience for all of us. We learned one lesson during that time, and that was speed, and that is why the prospective payment proposal moved so quickly this year.

We should probably get this conference out of the way so the members can come in this afternoon and work out the real problem.

I would like to take this opportunity to thank all of our panelists, our authors, our commentators, as well as our discussants, who have given a lot of their time to come here today.

I think it has been a fairly good and lively discussion.

What we will do right now is, we will move on to our closing presentation, which will be John Iglehart, to give us his thoughts on the conference.

I would like to thank all of the authors, the commentators, the discussants who have come here at their own time and expense to be with us, but also to thank the people from within who have put it together. CBO, CRS, and the committee staff have worked for a

long time on this project. When most of the rest of us were discussing social security financing, they were discussing this conference.

I would like to thank Paul Ginsburg and Marilyn Moon of the Congressional Budget Office who had support from Nancy Gordon in this effort.

There are many, many people from CRS who have worked on it. Many have participated in the panels in the last few days. I would like to thank in particular Janet Kline, Ruth Allison, and Karen Hardy from CRS who have done so much. From our own staff, Paul Rettig, who has been our moderator for the entire conference, Sandy Casber, Diana Jost, and Wendell Primus, who have done a tremendous amount of work getting this together, and keeping it relatively on time.

We are only 20 minutes late.

John, who is a very, very thoughtful and perceptive commentator, will summarize.

CONFERENCE SUMMARY

JOHN IGLEHART, Editor, Health Affairs, and Special Correspondent, the New England Journal of Medicine, Project Hope, Millwood, Va.

MR. IGLEHART. As this productive Conference on the Future of Medicare draws to a close, I think that it is well to remember that the circumstances of this program reflect a predicament that faces not only the United States but virtually every industrialized nation in the world—almost regardless of political philosophy or health policy approach. And that predicament is summed up simply by saying that health needs and demands are outstripping the resources available to meet them.

To place this summary in a political context, which is appropriate because when all is said and done the solution to medicare's long-term financing problem will be a political solution, we should note that we are gathered in the august chamber of a powerful congressional committee that oversees medicare. And it also oversees most of the other big-ticket social entitlement programs that consume an ever larger percentage of the gross national product.

For the last 5 years, this committee has struggled with tough prescriptions for dealing with the problem of health care costs. It demonstrated a boldness in the late 1970's by reporting out President Carter's hospital cost containment legislation. The House of Representatives rejected that legislation in November 1979, based largely on the arguments of two young legislators named Stockman and Gephardt who favored the private sector's proposed solution—the voluntary effort.

The VE has long been a dead letter, Stockman has been busy cutting social programs ever since from his powerful post at the OMB and Congressman Gephardt—a member of the Committee on Ways and Means—is pressing for a regulatory solution. So much for voluntarism.

Another piece of political lore that I believe is worth mentioning is that powerful health interests that usually were able to carry the day without much trouble, now are finding it increasingly difficult to claim policy victories. The American Medical Association, for example, won a stay of execution from mandatory assignment,

but the proposal—with the backing of the House Democratic leadership—clearly will be back next session. This is a classic pocket-book issue, pitting the economic standing of doctors against the out-of-pocket liability an elderly beneficiary must accept if he or she needs to visit a physician. Since the medicare program was created doctors have enjoyed the discretion to bill patients directly if in their judgment medicare payments were inadequate. Now, a growing number of legislators are of the mind that doctors should be compelled to accept as adequate payment what medicare will allow because physician discretion is translating into an ever-larger financial burden for the elderly.

I believe it is appropriate to point out that legislators who serve and have served—indeed, who sat in this very chair—on this committee were responsible for social security cash benefit increases and medicare benefit improvements that established in part the spending trends which are proving so troublesome today. My point is that placing blame, be it on legislators who enact the laws, doctors who render the service, hospitals which provide the physical facilities, or beneficiaries who demand and are indeed entitled by law to the care, is not a highly productive exercise. They are all party to a medical care system that has evolved from a time when the service provided was less complex and the expectations of the recipients were lower. The services have become highly sophisticated and costly, the physician population has grown dramatically as have the expectations of the beneficiaries. The fact of the matter is that there is no service in our society that is more highly valued today than medical care. So the challenge that lies ahead is not to diminish medical care as a priority, but rather to improve the efficiency and effectiveness of its delivery.

The opening remarks of Congressmen Shannon and Moore reflected this new sense of urgency. Both legislators characterized medicare's financing problems as the toughest domestic issue facing Congress in the immediate future. At the same time, though, Mr. Shannon indicated that he is not willing to abandon the expansion of the existing governmental role in extending social benefits. He did so by pointing out that adequate health care remains beyond the reach of many Americans, and adding: "We cannot allow the medicare financing crisis to divert attention away from the major work that remains to be done in assuring adequate health care for all Americans."

Mr. Moore, taking note of the recent enactment of medicare's DRG-based payment system stated that "the solutions we select are critical since they will set the direction in our health care delivery system in general just as the DRG prospective payment system . . . is setting the direction for hospital payment We expect to see that used heavily outside medicare across the spectrum of our health care delivery system." You may recall the Government's steadfast promise of 1965, contained in the medicare law, that the program would take no policy steps that could be construed as seeking to influence the practice of medicine. Times clearly have changed.

Marilyn Moon followed the Congressmen with an introduction to the medicare financing problem, a litany that has become familiar; as she pointed out, depletion of the HI trust fund is projected by

the end of the decade unless further policy changes are implemented. There is no need to detail chapter and verse on these figures. I would only note that the advisory council on social security recommended that planning for the financial stability of the HI trust fund should recognize the likelihood of a \$200 to \$300 billion deficit in this trust fund by the year 1995.

Another recent medicare financing estimate—generated by CBO, but not in Moon's paper—also caught my eye. And that was an estimate that in 1984 medicare outlays would grow substantially more than defense spending; and that in 1985 and 1986, the growth in medicare outlays would virtually equal the growth in defense spending.

Mr. Wolkstein's paper provides an interesting historical perspective; particularly worthy of note is how perceptions and policy goals change over time. Reflecting Government's concern over whether health care providers would play in the new medicare game in 1965, Mr. Wolkstein noted an "initial willingness by medicare to meet providers at least halfway to assure the adequacy of medicare payments. * * * Furthermore, physicians' charges were considered reasonable at virtually whatever level they charge medicare."

The paper prepared by Professor Hsiao and Mrs. Kelly tackled one of the thorniest issues facing medicare reformers—restructuring benefits. The scheme they advanced seeks to address what Professor Hsiao characterized yesterday as "two major flaws" in the benefits structure: the failure of medicare to protect beneficiaries from financial ruin and the inadequate information provided to beneficiaries so that they could become better informed purchasers of care.

The Hsiao-Kelly proposal would address the first flaw by limiting each beneficiary's maximum liability according to his family income so that his out-of-pocket payments would never exceed a fixed amount. Current law places no ceiling on the amount he is now required to pay. They emphasized that the proposed income-related ceiling is consistent with the basic principles of a social and insurance program. Neither eligibility nor covered services would be income-tested. While the expected value of benefits would vary according to family income under the proposal, they argued that such an approach is wholly consistent with social insurance principles as well.

Their proposal would increase cost sharing at the low end, but base the amounts on the particular provider selected. Cost-sharing requirements would be lower if a beneficiary selected a lower cost provider. This incentive placed on patients to seek out more efficient providers would encourage the development of more consumer information. They concede these changes would complicate the administration of medicare, but argue that in this era of computerization, these design changes could be made.

Professor Ginzberg was less sanguine about the feasibility of these changes. He maintained that imposing higher cost-sharing requirements would not likely lead to the changes of behavior that Hsiao and Kelly seek to foster because two-thirds of the medicare population offset these costs through medigap insurance policies.

Moreover, Ginzberg thought it would be a mistake to be too ambitious with cost-sharing requirements.

Ginzberg also expressed serious doubts that any scheme that sought to place hospitals and doctors in high, moderate, and low cost categories could work. "Everybody concerned would be in the courts," he said, seeking to win placement to a better category. Ginzberg also took exception to the notion of adding a catastrophic benefit at this time.

In response, Professor Hsiao disagreed with Ginzberg's view that classifying providers in different classes based on their costs would not work. He noted that private business coalitions are already about the task of disseminating price information on doctors and hospitals in their respective communities and such action is tantamount to classifying providers.

In the subsequent discussion, Moderator Paul Ginsburg noted that compared with medicare's financial problem, the estimated cost savings from the Hsiao-Kelly plan were "not very large." He then asked whether greater cost-sharing requirements held much promise for reducing overall resources used to treat medicare beneficiaries.

Sinn and Jones expressed the view that total resources consumed would not be reduced appreciably through higher cost-sharing requirements. Newhouse commented that new technology was the major culprit driving costs and that more cost sharing initially will not change that trend, thought it would reduce the level costs at each point in time.

The next paper on a proposed voucher system for medicare beneficiaries set off a more ideologically based discussion, pitting advocates of a market-based health economy against believers in a more regulatory prescriptive system with the Government in firm command.

Professors Friedman, LaTour, and Hughes opened their paper by pointing out that there exist two leading devices for discouraging inefficient use of resources: a higher consumer cost-sharing model, and a model which features contracting on a fixed-fee, periodic basis with a group of providers who are "at risk" for the total cost of care delivered. As an aside, I would note that the Reagan administration has pursued both of these policy courses, though to date it has been more bullish on cost sharing than it is on the comprehensive benefit, limited choice model exemplified by HMO's. I would also point out that the consumer cost sharing places the burden on the consumer to become more cost conscious. The second model—contracting with a group to provide comprehensive benefits on a fixed fee basis—places the onus on the doctors and hospitals to render cost-effective care because they are at economic risk to do so.

Friedman and his colleagues argue that these two approaches to more efficient consumption can be encouraged side-by-side in a voucher system, allowing people to opt for alternative health plans and to share in any savings of total costs. The authors outline a mandatory voucher system, pointing out correctly that such an approach would no longer implicitly subsidize the purchase of medigap supplementary policies. As a quick aside, Robert Patricelli pointed out yesterday that it would be "somewhat perverse" for us

to rail to some extent against medigap policies. "If people want to buy medigap policies to avoid unexpected medical expenses and to budget their health care costs, then who are we to create obstacles legislatively or otherwise to the purchase of this benefit," he said. That, of course, is true, but that does not mean Government must subsidize the purchase of such coverage if it leads to other untoward consequences.

The authors point out also that a mandatory system would eliminate what they characterize as the default option of current entitlements, that is, the possibility that people overestimate the value of current medicare coverage, particularly as it applies to long-term care and physician services. They found in "extensive interviews with medicare beneficiaries" that many elderly people overestimate the scope of medicare's coverage. The message there is that the Federal Government must search for better ways of informing the medicare beneficiary, a theme that runs through the conference and is deserving of some of HHS' scarce dollars.

Professor Luft had his problems with the paper. Problem No. 1 he identified was the reality that medicare would be relinquishing its monopsony power if it opted for a mandatory voucher approach. He characterized this by "the fact that medicare currently accounts for about a third of all admissions to short-stay hospitals [it] is able to achieve a discount estimated now at about 20 percent. It would lose this monopsony power if people were given vouchers." The authors countered this notion by suggesting that medicare cannot use this monopsony power without limit.

Initially, as you will recall, medicare bought into the medical marketplace on a retail basis, vowing not to use its economic leverage to win a better deal for the beneficiary or—more nearly—the taxpayer. Medicare is only beginning to attack large differences in allowable cost between hospitals and program growth that is substantially in excess of general price inflation. As Friedman and his coauthors pointed out: "This is a very restrained monopsony."

Clearly, Luft's major problem with advancing the voucher as an overall solution is the fact of adverse selection. That is to say high and lower users of medical care will enroll selectively in different health-care plans, depending upon their cost and comprehensiveness. Adverse selection is a problem that is not limited to the medicare population. Indeed, as Professor Luft pointed out, employed groups are having problems with this phenomenon as well. As Stan Jones noted, Blue Cross' experience in the Federal Employees Health Benefits Program has been so severe that it has threatened that private insurer's very involvement in financing the care of Federal employees.

The issue of adverse selection goes to the heart of one of the overriding questions looming ahead for medicare. That question is to what extent does society owe good health or at least solid repair of the damage to an individual who abuses his body during a life of excessive smoking, drinking or other destructive habits. The United States is a wealthy nation, of that there is no doubt. But there does seem to be a growing impatience with people who abuse their health. And we may be approaching a very American-like approach to this phenomenon: he or she who abuses their health is

free to do so, free in the sense of individual liberty, but not free in the economic sense. That is to say, we'll tax the abusers.

Another issue raised by Professor Luft is whether medicare's contribution should be a fixed dollar amount or a percentage of the total. The FEHBP program has managed public resources effectively—that is to say, moderated the cost of that program well, through a fixed dollar amount.

The question is whether we as a society—and Congress as its collective voice—are prepared to place the elderly at that kind of economic risk. Thus far, we have not been, but we also have looming ahead a large financial problem. Thus, even though Ignani and others of a like mind would prefer to, as she put it, banish the word voucher from our vocabulary, it is an option that must be examined closely. This is particularly true because the political circumstances will change between now and when Congress gets to the point of legislating a solution.

We learned this lesson with the DRG legislation, and Aaron pointed it out. When Congress looks for policy solutions, it examines most closely those approaches that have been tried and demonstrate some promise. We have failed too many times in designing past policies to adopt an attitude of writing off proposals at this early stage of debate that somehow do not fit neatly into our philosophic pigeonholes.

Friedman and his colleagues make an interesting point in this regard. They summarize the variety of uses to which vouchers have already been put. The FEHB program has offered a voucher-like system of health insurance for Federal employees since 1960. Since then, experience with individual choice within employment groups has grown to include roughly one-third of the population under 65. Now, HCFA's medicare HMO demonstrations are accumulating highly useful experience on how beneficiaries and providers behave under a voucher approach.

Clearly, there is concern among segments of the health policy-making community that a voucher would convert medicare from a social good to an economic product. A reflection of this issue could be derived from the comments of Patricelli, who suggested that health plans which enroll elderly beneficiaries should be allowed to retain the difference between the premium paid and the cost of providing the care. A compromise approach that has proven acceptable to at least the not-for-profit HMO's that have participated in the HCFA medicare voucher demonstrations requires that health plans plow back that money into improvements in benefits, thus providing beneficiaries a greater incentive to enroll in closed-panel plans.

And then we arrived at the subject of hospital and physician reimbursement under medicare. Professor Lave took us through an evolution of medicare's payment policy to the current new approach—prospective payment—which she said "represents a fundamental change in method of paying for hospital care;" it is a method "with which we have limited experience," she noted. Prospective payment will translate into a new set of economic incentives for hospitals and doctors which participate in medicare. The most important of these, Lave said, would be (1) incentives to decrease the services provided to patients and also (2) incentives to

decrease the lengths of hospital stays for particular diagnoses and increase the use of home health agencies, nursing home beds, and rehabilitation centers. Lave cited seven other new incentives that are, at the very least, thought-provoking. She sees a world of pervasive Government regulation ahead under a DRG-based system. And the direction of that regulation, she says, is already clear: increased preadmission review, increased Government involvement over how and where care is delivered, and increased control over the prices of individual services. Of the two long run alternatives, greater cost-sharing and increased use of competing capitated systems, she prefers the latter.

Bruce Vladeck shared with Professor Lave her belief that professional medical review organizations will be very important in the administration of prospective payment. At this point, the forgotten sister of prospective payment is its potential impact on the quality of services rendered. In our choice of new incentives that place providers at risk, we must clearly recognize that the beneficiaries are placed at greater risk as well. Managing effective peer review systems will become an important new ingredient in the economic equation of doctors and hospitals, but the Federal Government must not abandon that field to providers, argue Lave and Vladeck. Even a competitive stalwart like Dave Duranberger recognizes that, even if that classic marketeer down at OMB does not.

Lave noted that current law gives some encouragement to all payor State rate-setting programs. She expressed the view that innovations at the State level should not be discouraged, but that the Federal Government should take a neutral position. Vladeck was bullish in his advocacy of all-payor systems as a solution for subsidizing uncompensated care and supporting financially stressed hospitals. The impact of all-payor systems on the cost of care is a subject of endless and continuing fascination for policy analysts. Putting aside the question of impact on cost, it does seem fairly evident that all-payor systems are meaningful as an implicit approach to underwriting uncompensated care and supporting stressed urban hospitals. But there are clearly a lot of people around who believe that these questions should be addressed explicitly by society.

Lave and Vladeck agreed that a national uniform set of rates under a DRG-based system makes no policy sense. But this does point to the question of what will Congress do when it finally recognizes the degree of which medicare's largesse will be redistributed between sections of the country and different kinds of hospitals within those regions. I am not aware of another major public policy issue where Members of Congress were so unaware of the implications of a piece of legislation regarding its redistributive effects.

That, of course, raises a question for the future: Will Congress allow hospitals to go bankrupt, largely as a consequence of a Federal law?

Then we turned to physician reimbursement under medicare and the paper offered by Peter Fox. Dr. Fox notes that physician payment reforms advanced thus far include the explicit creation of a fee schedule, combining physicians' billing with hospital DRG's and developing physician-specific DRG's parallel in concept, though not in content, to hospital DRG's. Fox argues that none of these approaches is comprehensive, none addresses what he calls the:

“* * * underlying problem of the ‘blank check’ mentality associated with the incentives embodied in the fee-for-service system as it now operates, nor do any of them explicitly recognize physicians’ key role in directing the use of nearly all medical services.”

As an alternative, Fox proposes an areawide incentive system with the following key features: The designation of reasonable market areas; the setting of targets for total medicare expenditures within each market area; and the calculation at the end of the year of the difference between targeted and actual expenditures. Physicians would be rewarded or penalized depending on whether actual expenditures were less or greater than the target.

Jack Hadley noted that this proposal would represent a dramatic policy departure from medicare’s current methods of paying not only physicians but all providers. It would fall just shy of a fully budgeted medicare program because the spending targets would not be absolutely binding. Hadley agreed with Fox’s assumption that the key to making this approach work is translating the collective incentive to reduce spending to the level of the individual physician. Hadley said that “although areawide incentives give the appearance of setting a limit and using financial incentives to change behavior,” he feared “The basic structure was inconsistent with the theory and evidence of the behavior of individuals in groups.” And he provided some examples.

Hadley observed: “Dr. Fox’s goal in proposing the areawide incentive system is to reduce the increase in medicare spending without reducing either access or quality.” Hadley’s response was: “The harsh truth which Congress will have to face up to is that it probably can’t be done. As the administration learned in trying to balance the budget, raise defense spending, and cut taxes, you can do any two, but not all three.”

Probably the hardest question facing Congress on the medicare financing issue is how much medical care it is willing to pay for on behalf of the elderly. We have learned that demand is insatiable, but resources are finite. Hadley did not offer an answer to that question, but he did provide a useful transition to the next panel by saying:

“If medicare is going to have to make tough decisions about how to cut spending, then it should start evaluating the specific services that physicians provide by comparing what it pays to what it thinks the service is worth.”

Before we launch into that subject, though, the comments of Ben Lawton should be noted. By my observation, Lawton was the only fulltime practicing doctor on the program. He obviously has a view of his profession that is not shared widely, at least by his physician colleagues. As he put it, “physician fees are not related to the style of practice, but rather the style of life.” I don’t know what happens to surgeons in the closing chapters of their careers. There’s Lawton in Wisconsin, Benson Roe in San Francisco, and George Crile in Cleveland, all railing against their colleagues. Perhaps we should form an American Counter College of Surgeons and ask for their advice on a more regular basis. If it is any indicator of the sentiment in this room, one of the few bursts of applause registered during the conference came in response to Lawton’s observation: “Physicians are very likely going to take care of themselves.”

As an alternative to Fox's proposal, Lawton proposed physician fee schedules and mandated assignment. I was struck by the comments of Mr. Flaherty from Florida Blue Cross and Blue Shield. He painted a picture of robust economic competition in Florida for the medicare patient. And he expressed little concern that "in the current market, very few people will walk away from it." Flaherty reminded us in a vivid fashion that while Washington debates these policy issues, the system is hardly standing still out there. Indeed, insurers are becoming providers, providers are becoming insurers, and beneficiaries are becoming confused.

On to technology. The paper by Banta, Ruby, and Burns describes the current coverage policy used by HCFA in determining what medicare should pay for. The paper notes that: "attempts to control technology and thereby control costs have until now been rather ineffective." They conclude this is so because the forces of the health system run in the opposite direction. They say that the new DRG system is a first step in a new direction. It is perhaps worth noting that the technology manufacturers believe this is so, too. Two years ago the Health Industry Manufacturers Association worked aggressively to kill the National Center for Technology Assessment. Recently, this trade group became an aggressive lobbyist for adequate funding of the Prospective Payment Assessment Commission. Technology manufacturers fear that unless some effective counterweight is available, the Health Care Financing Administration, which is dominated by cost containment considerations, will not give adequate consideration to new technologies when it periodically adjusts medicare prices in the future.

The uncertain future of technology assessment raises the question: where are the doctors? Current efforts at medical cost containment are largely and narrowly confined to an economic paradigm; that is unfortunate. Most physicians have unnecessarily and unduly restricted themselves to concerns with the individual patient, leaving the solutions to overuse or misuse of medical resources in the general sense to others. Other actors—the politician, the economist, the bureaucrat—press forward with solutions most in keeping with their own training and experience. Physician railing against such solutions in the name of concern for patients, social equity, quality of care, professional freedom, or the vaunted reputation of American medicine is not productive. Physicians are best trained and equipped to tell us what works and what doesn't. But it hardly becomes the medical profession or, indeed, is it very useful to society, for doctors not to participate aggressively and fully in the process of technology assessment.

Rettig provided us with an extended summary of the paper prepared by Banta, Ruby, and Burns. He reiterated the recommendations of the authors for tightening up the process by which medicare makes decisions on what medical services it will finance. The author recommended a strengthening of the HHS Secretary's legal authority to make coverage decisions, a reorganization of the coverage process to encourage the identification of all new or emerging technologies and referral of all coverage decisions of national interest to HCFA's center office for review. The authors are also strongly of the view that medicare's contractors, intermediaries and carriers should include costs as an explicit criterion in the coverage decisionmaking process. They also argue that HCFA should have the explicit authority to limit benefit coverage to certain settings,

"We also need to ask the broader question of how to balance medicare recipients' well-being with that of younger working age population being taxed to support the elderly's need with the needs of low-income people across all age groups."

Meyer said the Davis-Rowland proposal relies too heavily on non-poor medicare beneficiaries to close the financial gap between the program's revenues and its expenses. "We should follow the lesson of the social security compromise of early 1983," Meyer said. "Whatever its limitations, it was fair in my view because it balanced the legitimate interest of our senior citizens with the legitimate interests of taxpayers. Each group gave up something."

Aaron followed with a critique of the last paper prepared for the conference, a discussion of alternative medicare financing sources authored by Long and Smeeding. Before launching into his discussion of the Long-Smeeding paper, Aaron observed that the policy approach Congress ultimately adopts to remedy medicare's financing problem will be profoundly affected by "whether or not Congress and the President find some way to close the overall budget deficit before the big decisions on medicare are taken."

If medicare's financing problem is enveloped in a broad national debate over how to reduce the massive Federal deficits that loom ahead, Aaron expressed concern that such an environment would "downgrade the urgency of (medicare) reforms * * * as second-order questions to be put aside until the on-budget issues have been addressed."

"Congress has the ingenuity to close the medicare deficit without materially altering other financing arrangements, but I think it would be a public policy tragedy if it did so. The problem of restoring the reality of a budget constraint in the health care plans of all patients and providers is perhaps the most important issue of domestic social policy in the remainder of this century."

In commenting upon the last two papers, former Social Security Commissioner Ball observed that Davis' extemporaneous comments were even better than her paper because "she talked herself out of the need for her proposal." By that he was in essence agreeing with her assessment of the magnitude of the financial problem facing medicare. "If we hold to present policy * * * in reimbursement for hospitals, market basket plus one, you are after \$90 billion, not \$300 or \$400 billion as has been reported."

Ball said he would add to present hospital reimbursement policy mandatory assignment for physicians, an increased tax on alcohol and tobacco and a tax on medigap insurance policies. Ball said he also favored combining parts A and B and imposing an income-related tax on all taxpayers. Salmon, who moderated the last session, said: "I think there are some people who might disagree that market basket plus one can hold through 1995."

Myers, who directed the staff of the commission which designed the social security compromise, said he opposed combining the two trust funds because "I am opposed to combining the two trust funds in part because they are financed from different sources. If payroll taxes and general revenue financing are mixed together with premiums, it will not be possible to see where the true costs are arising." He also expressed very strong opposition to infusing the hospital insurance trust fund with general revenues as a way

Finally, we turn to the financing issues and a new approach advocated by Davis and Rowland. They oppose a reliance on patient charges for health care services, such as hospital coinsurance because it would concentrate payments on the chronically ill. They also conclude that increases in payroll taxes or diversion of funds from general revenues are not promising at the present time given major increases in payroll taxes that have already been enacted and the massive deficits which loom ahead.

They propose a fundamental reform of medicare's financing approach by merging parts A and B in one trust fund financed by currently scheduled HI payroll taxes, general revenues currently projected for SMI and a new medicare premium related to income of the beneficiary. In passing, I believe it is worth noting that a growing number of policy analysts are considering the notion of abandoning or at least modifying the social insurance principles upon which medicare rests for beneficiary payments that are related in one way or another on one's economic status.

Davis and Rowland argue that this financing reform would provide an incentive to develop integrated cost control mechanisms, such as capitation payments to providers. Further, they say that reliance upon a premium which varies with income would assure that any financial contribution beneficiaries is equitably borne and does not place a burden on any individual beneficiary. They pointed out that currently there is a widespread disparity among the elderly in the per cent of income used to finance out-of-pocket medical care expenditures, ranging from about 2 percent of income for those with annual incomes over \$30,000 to 21 percent for those with incomes of less than \$5,000.

Meyer, the designated lead commentator of the Davis-Rowland paper whose policy views diverge significantly from those of the authors, complimented them on the paper, characterizing it as "very clear, concise, thorough, and provocative. It didn't dodge the tough issues." Meyer described as his "main problem" with the paper the authors' use of coinsurance as "a kind of strawman" that was set up only to be knocked down. "Cost sharing, with all of its flaws, is not quite as bad as they make it out to be," Meyer said, adding that "there are other major options for meeting this shortfall that they did not thoroughly explore."

An offsetting advantage of increased cost-sharing that was not acknowledged in the paper is its value as a brake on unnecessary utilization. "The authors seem to depict utilization reductions as all bad, if they are triggered by cost sharing," Meyer said. Cost sharing itself could be means tested or income related, but the authors did not acknowledge this, he maintained. "They established the harshest case for coinsurance and that is why I used the term strawman."

Meyer said the authors should have considered other options for addressing medicare's long-term financing problem, including increasing alcohol and tobacco taxes, increasing payroll taxes and interfund borrowing. "The problem, in my view, is that the focus of the analysis is too narrow. It looks at how to reconcile the fiscal needs of medicare with the well-being of medicare beneficiaries. That is an important perspective, but it is too narrow."

"We also need to ask the broader question of how to balance medicare recipients' well-being with that of younger working age population being taxed to support the elderly's need with the needs of low-income people across all age groups."

Meyer said the Davis-Rowland proposal relies too heavily on non-poor medicare beneficiaries to close the financial gap between the program's revenues and its expenses. "We should follow the lesson of the social security compromise of early 1983," Meyer said. "Whatever its limitations, it was fair in my view because it balanced the legitimate interest of our senior citizens with the legitimate interests of taxpayers. Each group gave up something."

Aaron followed with a critique of the last paper prepared for the conference, a discussion of alternative medicare financing sources authored by Long and Smeeding. Before launching into his discussion of the Long-Smeeding paper, Aaron observed that the policy approach Congress ultimately adopts to remedy medicare's financing problem will be profoundly affected by "whether or not Congress and the President find some way to close the overall budget deficit before the big decisions on medicare are taken."

If medicare's financing problem is enveloped in a broad national debate over how to reduce the massive Federal deficits that loom ahead, Aaron expressed concern that such an environment would "downgrade the urgency of (medicare) reforms * * * as second-order questions to be put aside until the on-budget issues have been addressed.

"Congress has the ingenuity to close the medicare deficit without materially altering other financing arrangements, but I think it would be a public policy tragedy if it did so. The problem of restoring the reality of a budget constraint in the health care plans of all patients and providers is perhaps the most important issue of domestic social policy in the remainder of this century."

In commenting upon the last two papers, former Social Security Commissioner Ball observed that Davis' extemporaneous comments were even better than her paper because "she talked herself out of the need for her proposal." By that he was in essence agreeing with her assessment of the magnitude of the financial problem facing medicare. "If we hold to present policy * * * in reimbursement for hospitals, market basket plus one, you are after \$90 billion, not \$300 or \$400 billion as has been reported."

Ball said he would add to present hospital reimbursement policy mandatory assignment for physicians, an increased tax on alcohol and tobacco and a tax on medigap insurance policies. Ball said he also favored combining parts A and B and imposing an income-related tax on all taxpayers. Salmon, who moderated the last session, said: "I think there are some people who might disagree that market basket plus one can hold through 1995."

Myers, who directed the staff of the commission which designed the social security compromise, said he opposed combining the two trust funds because "I am opposed to combining the two trust funds in part because they are financed from different sources. If payroll taxes and general revenue financing are mixed together with premiums, it will not be possible to see where the true costs are arising." He also expressed very strong opposition to infusing the hospital insurance trust fund with general revenues as a way

to eliminate the fund's deficit. "I think the general revenue financing is deceptive and irresponsible, because I think it hides the costs from general view." And he also characterized himself as "very lukewarm on using taxes on tobacco and alcohol as a means of financing medicare. It is an unpredictable source of financing."

Cohen, former secretary of the Department of Health, Education, and Welfare, was introduced by Salmon as "the person my chairman [Representative Dan Rostenkowski] regards as the conscience of our committee on the subject of social security." Cohen said his attitude was shaped in large part by the realities of politics. "Sixty to eighty percent of the older people vote, and only 25 to 50 percent of the younger people vote * * *. So I am somewhat sympathetic with Bob Myers' point, which is if you don't have to change something very fundamentally, why do it? People have become accustomed to whatever the rationale of the present program is, and to institute a whole new basis of dealing with the program makes people very unsure, not only about the medicare and social security system, but also about Congress commitments that it has made in the past * * *. I would be very hesitant about making any major changes unless they were absolutely necessary however. Therefore, the first thing that I would do is to take hospital insurance out of the Federal unified budget."

Cohen said he, too, would combine parts A and B and use general revenues to make up the deficit "but quite frankly, I would not go beyond a third to 40 or 50 percent of the total costs, because I want to see the payroll taxes be an important part of the financing of this program, because that substantiates the moral and political commitment that people have made to pay for part of this program * * *. That was the leading reason why, among other factors, we were able so successfully to defeat President Reagan's 12 cutbacks in social security that he made in 1981, that since people helped pay for the program, it shouldn't be cut for budget purposes."

Cohen said his overriding policy preference for dealing with medicare's financing problem would be "quite frankly [to] just have line 37 on the income tax [form], a very simple line after the exemptions and put a flat tax on total adjusted gross income, minus the exemptions, and make it high enough to pay whatever the residual difference of the medicare financing needs are going to be."

Cohen characterized himself as "absolutely opposed to any increase in the cost-sharing of this program. As a matter of fact, I very reluctantly went along when we initiated it."

Cohen, as did several other speakers, mentioned in passing what he characterized as "the most serious long run financial problem of medicare"—terminal illness, "the Judeo-Christian emotional aspect of decisionmaking of a moral, ethical character in relation to terminal illness. Until we solve that question, and I don't know how to solve it * * * the medicare costs are going to rise, rise, rise and all this business about DRG's and mandatory assignment and physicians fees, they are only little pips on the big problem, because terminal illness is taking the biggest share of medicare costs."

Fullerton, who for a number of years served as the lone health staff professional on the Committee on Ways and Means, joined the chorus of advocates for merging parts A and B of medicare, saying:

"I think there is precedent for doing this now with the new social security financing plan."

Salmon concluded his role as moderator by pointing to the importance of speed in developing legislative solutions to public policy problem. He said the Committee on Ways and Means "learned one lesson" when it dealt with President Carter's hospital cost containment legislation in the late 1970's, "and that was speed." In that context, Salmon was being facetious because as a consequence of an absence of speed, Carter's cost control plan was riddled by amendment and ultimately rejected by the House of Representatives in November 1979. Salmon said the prospective payment legislation went through Ways and Means in remarkably short order because of the lesson learned from the hospital cost containment debate.

Mr. PAUL RATTIG. We thank you for a very excellent conference summary, and that concludes our conference.



