# Theme 2: Improving Managed Care Payment and Delivery

The Balanced Budget Act of 1997 created the Medicare+Choice (M+C) program, expanding beneficiary choices to include a broader range of coordinated care plans such as health maintenance organizations (HMOs), preferred provider organizations, provider-sponsored organizations, medical savings accounts, and private fee-for-service plans. Since 1997, CMS has been working to ensure a wide range of high-quality health care options for Medicare beneficiaries. As part of this effort, we continue to devote significant time and effort to better understanding the M+C program's successes and shortcomings. For example, we are developing systems for measuring beneficiary risk to refine capitated payments, and conducting demonstrations that test and evaluate the effectiveness of a wide range of capitated health plan arrangements to increase the choices available to Medicare beneficiaries. CMS research and demonstration projects include Medicare capitation demonstrations, Medicare capitation models that integrate acute and long-term care services, an examination of trends in HMO enrollment, and other aspects of M+C plan. In addition, we are examining programs to increase access and quality of health care for Medicaid beneficiaries and limit rising costs through the increased use of managed care.

#### Lower Costs or Better Benefits Were The Most Common Reasons for Joining a Medicare Risk HMO



Source: CMS, Office of Research, Development, and Information: Data from the Medicare Current Beneficiary Survey (MCBS) 2001 Access to Care File.

## 00-110 Next Generation Medicare Managed Care Payment System

**Project Officer**: Benson Dutton

**Period:** September 2000–September

2002

Awardee: Urban Institute Funding: \$635,897

**Description:** This project assesses a possible "next generation" payment methodology (currently called the "Direct Model") for the Medicare+Choice (M+C) program. Under this direct model, managed care payments would move away (all or in part) from their current county FFS basis. In this direct payment approach, risk adjustment models could be calibrated using either a combination of FFS and managed care encounter data, or managed care data alone. This study

presents a conceptual paper that describes and makes possible one possible approach to managed care payments without a fee-for-service (FFS)-based county rate book.

**Status:** This project was completed.

# 99-036 Evaluation of New Jersey Hospital Association Demonstration of Performance Based Incentives

**Project Officer**: Edgar Peden

**Period:** September 2002–September

2004

**Awardee:** Health Economics Research

**Funding**: \$498,104

**Description:** The purpose of this evaluation is to provide CMS with timely feedback on the implementation and operational experience of the demonstration site. A case study methodology will be used to develop both qualitative and quantitative information required to assess the strengths and weaknesses of the demonstration.

**Status:** Formerly called "Evaluation of the Competitive Pricing Demonstration—Phase I".



# 01-285 Medicare/DoD Subvention Demonstration - Validation of Payment Reconciliation

**Project Officer:** Ronald Deacon Period: July 2002–June 2002

**Awardee:** PriceWaterhouse Coopers

**Funding:** \$84,759

**Description:** This project validates payment reconciliation at the end of the third year of the demonstration and related consulting services as needed.

## 98-236 Department of Defense Subvention Demonstration Evaluation

**Project Officer:** Victor McVicker

**Period:** September 1998–March 2002

**Awardee:** RAND Corporation

**Funding:** \$1,411,439

**Description:** Under the demonstration, enrollment in the Department of Defense's (DoD) Senior Prime plan is offered to military retirees over age 65 who live within 40 miles of the primary care facilities of one of the six sites, have recently used military health facility services, and are enrolled in Medicare Part B. The Senior Prime plans must meet all relevant requirements for Medicare+Choice plans. Medicare makes a capitation payment to DoD for each enrollee, and DoD must maintain a level of effort for health care services to all retirees who are also Medicare beneficiaries. whether or not they choose to enroll, that is based on fiscal year 1996 DoD experience. The evaluation seeks to answer the basic question: can DoD and Medicare implement a cost-effective alternative for delivering accessible and quality care to military-Medicareeligible beneficiaries? The evaluation will seek the answer by examining issues in four basic areas: 1) enrollment demand; 2) enrollee benefits; 3) cost of the program; and 4) impacts on other DoD and Medicare beneficiaries.

**Status:** Reports are available from the National Technical Information Service (NTIS): accession numbers PB99 149056 and PB99 162505. In addition,

General Accounting Office (GAO) Reports are available on the GAO website (http://www.gao.gov): GAO/HEHS 99-39 and GGD-99-161.

## 97-030 Medicare Choices Demonstration: Verification of Encounter Data

**Project Officer:** Victor McVicker

**Period:** September 1997–September

2002

**Awardee:** MEDSTAT Group (DC)

**Funding:** \$2,640,401

**Description:** This project ensures accurate and comprehensive encounter data are reported in the Medicare Choices Demonstration. It assesses the health plan information systems' capabilities, the overall reasonableness of the encounter data against benchmarks, and the validity of the encounter data against medical record information. On a quarterly basis and for each of the plans participating in the demonstration, a sample of enrollees is selected and medical records are examined to determine whether the information in the encounters (pseudo-claims) reflects what is in the medical record. Using the medical record, the project assesses the timeliness of the encounter data, the validity of the codes in the encounter data, and the completeness of the information.

**Status:** The data are being finalized to make the risk adjusted payments. The Medicare Choices

Demonstration plans have had considerable difficulty supplying encounter data that is in the correct format and that contains all the required information to the FIs and carriers. As a result, most of Medstat's efforts have been directed at providing technical assistance to the plans rather than performing the medical record reviews as originally planned.

## 98-237 Evaluation of the Medical Savings Account Demonstration

**Project Officer:** Renee Mentnech

**Period:** September 1998–September

2003

Awardee: Barents Group Funding: \$6,546,119



**Description:** This project evaluates the Medical Savings Account (MSA) Demonstration. It compares the experience of MSA enrollees with other Medicare beneficiaries. The contractor will also act as a coordinator between CMS and the demonstration participants, including beneficiaries and health plans, in order to ensure that accurate, reliable, and complete data are collected.

**Status:** To date, no insurers have elected to participate in the MSA Demonstration. In light of this development, a report is being prepared on the reasons for this lack of interest.

00-111 Survey of Medicare Beneficiaries Who Were Involuntarily Disenrolled from HMOs that Withdrew from Medicare or Reduced their Service Areas

**Project Officer**: Gerald Riley

**Period:** September 2000–October 2002

Awardee: University of Wisconsin -

Madison

**Funding:** \$551,823

**Description:** This project involved development and implementation of a survey that asks about the experience of beneficiaries whose plans withdrew from Medicare or reduced their service areas in January 2001. As a result, Medicare beneficiaries were disenrolled involuntarily, and had to enroll in another health maintenance organizations (HMOs) or go to feefor-service (FFS). This project studies the impact of the HMO withdrawals on the beneficiary population. Beneficiaries are asked: what insurance arrangements they made after their plan withdrew from Medicare or reduced its service area; how their benefits and out of pocket costs were affected by new arrangements necessitated by their plan's withdrawal; and whether they had to change doctors. The survey was conducted by mail with telephone follow-up and consists of 20-30 questions.

**Status:** The survey specifically addressed what type of new insurance arrangements beneficiaries made; what their informational needs were; disruptions to patterns of care; changes in benefits; changes in out of pocket costs; psychological impacts; and differences among subgroups of beneficiaries. Approximately

3,400 beneficiaries responded. Preliminary analyses indicated that most beneficiaries found the information they received about the withdrawals to be adequate, but there were clear information and understanding gaps among beneficiaries regarding the options available to them and the implications of plans withdrawing from Medicare.

#### 97-022 Capitation Demonstration, Evaluation

Project Officer: Joel Greer

Period: August 1997–May 2002

Awardee: Lewin Group Funding: \$2,442,533

**Description:** The project uses survey, claims, and medical records data to evaluate the efficacy and cost-effectiveness of permitting Medicare beneficiaries with End Stage Renal Disease (ESRD) to enroll in managed care.

Status: Preliminary analyses are completed.

02-055 Investigation of Increasing Rates of Hospitalization for Ambulatory Care Sensitive Conditions among Medicare Beneficiaries

**Project Officer**: Mary Kapp

Period: September 2002–March 2004
Awardee: Research Triangle Institute, (DC)

**Funding:** \$172,671

Description: The purpose of this project is to examine trends in the rates of inpatient hospital care of the elderly for ambulatory care sensitive conditions (ACSC) or "avoidable hospitalizations." This project uses existing Medicare data to examine the nature of the increases in ACSC hospitalizations, identify the sub-populations most affected, and explore more fully the reasons for these trends, with particular emphasis on policy issues which offer promise to reverse the trends. CMS data also provide sufficient sample size to permit investigation of supply factors, access issues, and geographic patterns.



96-083 End Stage Renal Disease (ESRD)
Managed Care Demonstration: Health Options

**Project Officer:** Bonnie Edington

**Period:** September 1996–December

2002

**Awardee:** Advanced Renal Options

Funding: \$0

**Description:** The original demonstration program, Advanced Renal Options, tested whether open enrollment of End Stage Renal Disease (ESRD) patients in managed care was feasible with a capitation rate adjusted for age, treatment status, and cause of renal failure, and additional payment made for extra benefits.

**Status:** Data collection for evaluation purposes ended May 2001, at the conclusion of the mandated 3-year period, and the evaluation report was due May 2002. Waivers were renewed for the period June 2001 through December 2002 for residual demonstration enrollees to continue to receive the extra benefits, with CMS paying an unadjusted capitation rate based on the demonstration rate.

01-168 Pilot Test and Analysis of the Medicare Health Survey for Program for All-Inclusive Care for the Elderly (PACE) and EverCare (MHSPE)

**Project Officer:** Ron Lambert

**Period:** September 2001–September

2004

**Awardee:** Health Economics Research

**Funding**: \$428,922

Description: The purpose of this project is to determine the feasibility of implementing a variant of the Health Outcome Survey (HOS) for organizations that serve special populations, such as the Program of All-Inclusive Care for the Elderly (PACE) and EverCare. CMS developed a variant of the HOS for use with frail Medicare beneficiaries enrolled in specialty plans. This survey was intended to serve as a means to compare outcome measures across Medicare+Choice and specialty plans and to support further research on payment to specialty plans. The primary goals of the Medicare Health Survey for PACE and EverCare

(MHSPE) were: to improve response rates over the experience of the 1999 HOS and to more accurately describe the health and functional status of the target populations. CMS will pilot test the MHSPE on a subset of PACE and EverCare enrollees. This current project will: 1) administer the MHSPE to a sample of PACE and EverCare enrollees; 2) collect and validate MHSPE pilot survey data; and 3) perform the appropriate analysis to measure the impact on response rates of various approaches administered under the pilot survey.

**Status:** To assess the feasibility of applying HOS to specialty plans, the survey was administered to PACE and EverCare on a pilot basis in 1999. The response rates to the HOS for these plans were significantly below the response rates for the Medicare+Choice program.

96-056 Program of All-Inclusive Care for the Elderly (PACE) Quality Assurance

**Project Officer:** Mary Wheeler

**Period:** September 1990–September

2002

**Awardee:** Center for Health Policy

Research, University of Colorado

**Funding**: \$3,203,917

**Description:** The purpose of this project is to develop a core data set that is the foundation for an outcomebased quality improvement (OBOI) system for the Program of All-Inclusive Care for the Elderly (PACE) program. The OBQI system consists of two phases during which the PACE sites complete the data instrument that contains items for outcome measurement and risk adjustment at specific time intervals. Using the data collected in the first phase, site-level reports can be produced summarizing the outcome measures. By comparing site-level case-mix adjusted outcome reports to other PACE site outcome reports, and to the site's previous outcome reports from earlier time periods, the site, CMS, and the State Medicaid agencies are able to identify areas that require further examination due to inferior (or perhaps superior) outcomes. In the second phase, the sites take a closer look at why and how the specific outcomes are



achieved and makes recommendations for improvements in the case of poor (or perhaps superior) outcomes.

**Status:** Significant progress has been made in the development of outcome indicators for PACE. The OBQI contract was modified in October 1999, which expanded the period of performance and increased the level of effort to support the development of a Core Comprehensive Assessment (COCOA) instrument for PACE providers. Although this change in the timeline will delay the OBQI component, the burden of data collection on the PACE sites will be decreased.

#### 01-214 Evaluation of the Program of Allinclusive Care for the Elderly (PACE) as a Permanent Program and of a For-Profit Demonstration

**Project Officer:** Frederick Thomas III

**Period:** September 2001–September

2003

**Awardee:** Mathematica Policy Research,

(Princeton)

**Funding:** \$819,772

**Description:** This is an evaluation of the Program for All-Inclusive Care for the Elderly (PACE) program. The evaluation studies PACE as a demonstration project, as a permanent program under Medicare, and as an option under Medicaid. This project first evaluates in terms of: site attributes, patient characteristics, and utilization data statistically analyzed across sample sites and compared to the prior demonstration data. This project expands on the foundations laid in the previous evaluations of PACE by predicting costs beyond the first year of enrollment, assessing the impact of higher end of life costs and long term nursing home care, and assessing the impact of local treatment practices. Secondly, for the evaluation of the for-profit demonstration, the specific questions from the Balanced Budget Act should be answerable by comparing site attributes, patient characteristics, and utilization data of the permanent PACE providers to the for-profit demonstration providers.

**Status:** Phase I was extended to September 2003.

### 02-052 Integrated Payment Option Support Contract

**Project Officer:** Raymond Wedgeworth **Period:** September 2002–September

2006

**Awardee:** Research Triangle Institute, (DC)

**Funding**: \$496,279

Description: This demonstration utilizes the capabilities of integrated delivery systems by offering them a financial incentive to manage care and integrate services for beneficiaries across an entire defined episode of care. One example of an "episode of care" is inpatient treatment and post acute care for stroke where the patient would benefit from improved coordination of the range of services required for this diagnosis. A single episode payment would cover Part A (all benefits available to the covered population) and Part B (physician and possibly other services covered under Part B). This demonstration will compare alternate methods for calculating payment rates using different assumptions such as, co-morbid conditions, stage of diagnosis, and mix of services.

**Status:** CMS plans to implement the Integrated Payment Option demonstration in January 2004. CMS will select premier integrated delivery systems and give a bundled Part A & Part B payment (global payment) for all inpatient facility, post-acute and physician services related to 3-5 specific DRGs. Six to 8 sites will be selected.

# SECOND GENERATION SOCIAL HEALTH MAINTENANCE ORGANIZATION DEMONSTRATION

The purpose of the second-generation social health maintenance organization (S/HMO-II) demonstration is to refine the targeting and financing methodologies and the benefit design of the current S/HMO model. The S/HMO integrates health and social services under the direct financial management of the provider of services. All acute and long-term-care services are provided by or through the S/HMO at a fixed, annual, prepaid capitation sum. The S/HMO-II model provides an opportunity to test models of care focusing on geriatrics.



# 99-271 Second Generation Social Health Maintenance Organization Demonstration: Florida

**Project Officer:** James Hawthorne **Period:** May 1998–June 2002

**Awardee:** Florida, Department of Elder

**Affairs** 

**Funding:** \$150,000

**Description:** This project funds the Florida State Department of Elder Affairs purchase of technical assistance and planning activities for a second generation social health maintenance organization (SHMO). The goal of this project is to study the feasibility of implementing a Second Generation SHMO in Florida and, should this prove feasible, to develop the specifications needed for the State to issue a Request for Proposal.

**Status:** A second 12-month no-cost extension was approved extending the period of performance to June 2002.

84-007 Social Health Maintenance Organization Project for Long-Term Care: SCAN Health Plan

**Project Officer:** Thomas Theis

Period: August 1984–August 2003

**Awardee:** SCAN Health Plan

Funding: \$0

Description: This project was developed to implement the concept of a social health maintenance organization (S/HMO) for acute- and long-term care. An S/HMO integrates health and social services under the direct financial management of the provider of services. All services are provided by or through the S/HMO at a fixed, annual, prepaid capitation sum. Four sites originally were selected to participate; of the four, two were health maintenance organizations that have added long-term care services to their existing service packages, and two were long-term care providers that have added acute-care service packages. SCAN Health Plan is one of the long-term care provider sites that developed and added an acute-care service component.

Status: SCAN Health Plan implemented its service delivery network in March 1985. SCAN uses both Medicare and Medicaid waivers. The Balanced Budget Act of 1997 extended the demonstration period through December 2000. The Balanced Budget Refinement Act of 1999 extended the demonstration. The Benefits Improvement and Protection Act of 2000 further extended the demonstration. This report addresses transitioning S/HMOs and similar plans to the Medicare+Choice program and appropriate payment levels for these organizations. The report was sent to Congress in February 2001, making the end date July 2003.

95-088 Second Generation Social Health Maintenance Organization Demonstration: Nevada

**Project Officer:** Thomas Theis

Period: November 1996–August 2003 Awardee: Health Plan of Nevada, Inc.

Funding: \$0

**Description:** The purpose of this second-generation social health maintenance organization (S/HMO-II) demonstration is to refine the targeting and financing methodologies and the benefit design of the current S/HMO model. The S/HMO integrates health and social services under the direct financial management of the provider of services. All acute and long-term-care services are provided by or through the S/HMO at a fixed, annual, prepaid capitation sum. The S/HMO-II model provides an opportunity to test models of care focusing on geriatrics. The Health Plan of Nevada is one of six organizations originally selected to participate in the project.

Status: The Balanced Budget Act of 1997 extended the demonstration period through December 2000. The Balanced Budget Refinement Act of 1999 extended the demonstration. The Benefits Improvement and Protection Act of 2000 further extended the demonstration. This report addresses transitioning S/HMOs and similar plans to the Medicare+Choice program and appropriate payment levels for these organizations. The report was sent to Congress in February 2001, making the end date July 2003. Health Plan of Nevada (HPN) is the only operational site in



the demonstration. HPN began enrolling beneficiaries in the demonstration in November 1996. HPN enrollment at the end of 2001 was over 38,000 members.

84-006 Social Health Maintenance Organization Project for Long-Term Care: Kaiser Permanente Center for Health Research

**Project Officer:** Thomas Theis

Period: August 1984–August 2003
Awardee: Kaiser Permanente Center for

Health Research

Funding: \$0

**Description:** This project was developed to implement the concept of a social health maintenance organization (S/HMO) for acute- and long-term care. An S/HMO integrates health and social services under the direct financial management of the provider of services. All services were provided by or through the S/HMO at a fixed, annual, prepaid capitation sum. Four demonstration sites originally were selected to participate- two were health maintenance organizations (HMOs) that have added long-term care services to their existing service packages, and two were long-term care providers that have added acutecare service packages. Kaiser Permanente Center for Health Research (doing business as Senior Advantage II) is one of the HMO sites that developed and added a long-term care component to its service package.

Status: Senior Advantage II (formerly Medicare Plus II) implemented its service delivery network in March 1985. Senior Advantage II used Medicare waivers only. The Balanced Budget Act of 1997 extended the demonstration period through December 2000. The Balanced Budget Refinement Act of 1999 extended the demonstration. The Benefits Improvement and Protection Act of 2000 further extended the demonstration. This report addresses transitioning S/HMOs and similar plans to the Medicare+Choice program and appropriate payment levels for these organizations. The report was sent to Congress in February 2001, making the end date July 2003.

84-004 Social Health Maintenance Organization Project for Long-Term Care: Elderplan, Inc. (Formerly, Social Health Maintenance Organization Project for Long-Term Care)

**Project Officer**: Thomas Theis

Period: August 1984–August 2003

**Awardee:** Elderplan, Inc.

Funding: \$0

Description: This project was developed to implement the concept of a social health maintenance organization (S/HMO) for acute- and long-term care. An S/HMO integrates health and social services under the direct financial management of the provider of services. All services are provided by or through the S/HMO at a fixed, annual, prepaid capitation sum. Four demonstration sites originally were selected to participate; of the four, two were health maintenance organizations that have added long-term care services to their existing service packages and two were long-term care providers that have added acute-care service packages. Elderplan is one of the long-term care provider sites that developed and added an acute-care service component.

**Status:** Elderplan implemented its service delivery network in March 1985. Elderplan uses both Medicare and Medicaid waivers. The Balanced Budget Act of 1997 extended the demonstration period through December 31, 2000. The Balanced Budget Refinement Act of 1999 extended the demonstration until 18 months after the Secretary submits the S/HMO Transition Report to Congress. The Benefits Improvement and Protection Act of 2000 further extended the demonstration until 30 months after the S/HMO Transition Report to Congress is submitted. This report addresses transitioning S/HMOs and similar plans to the Medicare+Choice program and appropriate payment levels for these organizations. The report was sent to Congress in February 2001, making the end date July 2003.



### 97-210 Data Collection for Second Generation SHMO

**Project Officer**: Thomas Theis

**Period:** November 1996–December

2003

Awardee: Lewin Group Funding: \$7,052,998

**Description:** This project consolidated the data collection needs of the Second Generation Social Health Maintenance Organization (S/HMO-II) Demonstration. The project conducted initial and annual follow-up surveys for each beneficiary enrolled in the S/HMO-II demonstration. The information gathered served three primary functions: 1) baseline and follow-up data for the analyses; 2) clinical information to the participating S/HMO-II sites for care planning; and 3) data for risk-adjustment. In addition, this project supports a Congressionally mandated requirement for an evaluation component and formal Report.

**Status:** While multiple sites were originally planned for this demonstration, only one, the Health Plan of Nevada, actually implemented a SHMO II plan. The evaluation is designed to assess the impact of the SHMO II by comparing it with regular Medicare+Choice sites using measures of utilization, quality of care, and changes in participant health status over time. Reports to Congress were due November 2002.

## 97-018 Age Well Option (now referred to as TLC)

**Project Officer:** William Clark

Period: May 1997–April 2002

Awardee: Hebrew Rehabilitation Center

for the Aged

**Funding:** \$600,000

**Description:** In this project, community care and educational protocols are used to test the hypothesis that clients can be educated and empowered to more actively participate in their own health care planning, decisionmaking, and chronic disease management. The populations studied are individuals living in the

Hebrew Rehabilitation Center for the Aged and those living in subsidized housing in the Boston community. Educational protocols are used to test the hypothesis that clients can be educated and empowered to more actively participate in their own health care planning, decision-making, and chronic disease management.

Status: In progress.

## 97-216 Evaluation of the Evercare Demonstration Program

Project Officer: John Robst

Period: September 1997–March 2002
Awardee: University of Minnesota, (Wash

Ave)

**Funding:** \$1,544,142

**Description:** For each of the five EverCare sites, two comparison groups were selected—1) nonparticipating residents in EverCare site nursing homes and 2) residents in nonparticipating nursing homes operating in EverCare demonstration cities.

**Status:** Site visits have been made to EverCare and non-EverCare facilities in each of the participating sites. A survey of Ever Care residents, proxies for residents, and control group nursing home residents has been conducted. Data are currently being analyzed. A final evaluation report was expected in late 2001.

#### 00-085 Ambulatory Care Sensitive Conditions - II

**Project Officer:** Jennifer Harlow

Period: September 2000–March 2002 Awardee: Health Economics Research

**Funding:** \$171,736

**Description:** The purpose of this task order is to further refine and validate hospital discharge rates for Ambulatory Care Sensitive Conditions (ACSCs) and develop a method for case-mix adjusting the ACSC rates at the Medicare+Choice (M+C) organization level. An ACSC is a hospitalization which was potentially avoidable with the provision of timely and effective ambulatory care. These tasks will be conducted using M+C inpatient encounter data



submitted to CMS for the period July 1997 though June 1998 and also fee-for-service (FFS) claims data for the same time frame. The presence of an ACSC provides an indication that an individual may not have been receiving appropriate ambulatory care. The preliminary research using one year of M+C encounter data has shown that the rates can be applied at the M+CO level to evaluate the provision of care; however, before the ACSC rates can be used as a measure to evaluate M+CO performance, the rates should be further refined and validated for the population over age 65. Additionally, in order to compare rates of ACSCs at the M+CO level, a method for case-mix adjusting rates needs to be developed in order to account for variation in the health status of M+CO enrollees.

**Status:** The contractor has conducted data analyses and has produced draft reports on the refinement of different ACSC indices and case-mix adjustment.

### 00-019 Risk Adjustment Implementation for Medicare Demonstrations

**Project Officer:** Victor McVicker

**Period:** September 1999–March 2002

**Awardee:** Fu Associates **Funding:** \$68,426

**Description:** This project provides technical assistance regarding risk adjustment to Medicare Choices Demonstration, Department of Defense Subvention Demonstration, Social Health Maintenance Organizations Demonstration I, and Social Health Maintenance Organizations Demonstration II populations.

**Status:** A modification to the contract provides an additional task for the contractor to calculate risk adjuster scores for the treatment and control groups used in the evaluation of the Community Nursing Organization demonstration.

# 02-060 Refinements to Medicare Diagnostic Cost Group (DCG) Risk Adjustment Models

Project Officer: Melvin Ingber

**Period:** September 2002–September

2004

**Awardee:** Boston University

**Funding:** \$568,038

**Description:** A set of models to provide risk adjuster measures for the purpose of determining payments to capitated managed care organizations was developed under contract with CMS (#500-92-0020 Task Order 6), and were then further improved (#500-95-0048 Task Order 3). This task order will test the model for use in special populations to develop satisfactory payment for plans that enroll beneficiaries selectively based on their medical, functional or institutional condition. The DCG-based models are designed to use demographic and diagnostic information to project expenditures and to provide factors that could be used to multiply the ratebook amounts instead of the demographic factors currently used.

# 96-211 Refinements to Medicare Diagnostic Cost Group Risk Adjustment Models

**Project Officer:** Melvin Ingber

Period: September 1996–July 2002 Awardee: Health Economics Research

**Funding:** \$845,277

Description: A set of models to provide risk adjuster measures for the purpose of determining payments to capitated managed care organizations has been developed and subsequently improved. This project further updates the models with newer data (1995-1996) and provides better adjustment for factors such as "working aged" and "institutionalized." These risk adjuster models go beyond demographic information in adjusting payments to include clinical information from medical claims, which is used to modify payment to reflect the expected expenditures for each enrollee. The diagnostic-cost-group (DCG) family of models is the most mature set of risk adjusters available and uses demographic, diagnostic, and procedure information to project expenditures and



provide adjusters that could be used to multiply the rate book amounts instead of the demographic factors.

**Status:** BBA required a hospital-based model be used

by year 2000.

#### 01-283 Testing Comprehensive Risk Adjustment Models for Coding Gameability

Project Officer: John Robst

**Period:** August 2001–April 2002 **Awardee:** Park Nicollet Institute

**Funding:** \$215,116

**Description:** This will assist in assessing and evaluating five different risk adjustment models based on whether providers' discretion over coding may influence payment (gameability). Specifically, the project will convene a series of provider panels to address the gameability issue. In the assignment of codes from the International Classification of Diseases, Ninth version, Clinical Modification, providers have some legitimate discretion over the selection of the appropriate diagnosis that can be assigned to reflect the severity of the illness and to identify the presence of conditions. Within the range of defensible diagnoses, some codes generate higher payments than others, and providers could have an incentive to choose the code that gives the higher payment. To the extent that coding patterns shift from the one used as the basis for calibrating a risk adjustment model, such changes in coding would result in overpayments. The project will identify codes where there is room for discretion. It will then review the risk adjustment models to determine whether the logic of each model's grouping is more or less vulnerable to gaming through coding choices. The project's focus is not fraudulent assignment of diagnostic codes but on the legitimate possibilities available within normal clinical and coding practices.

**Status:** Diagnostic codes have been identified for consideration by the expert panels. A pilot evaluation of two conditions has been conducted. The contractor is recruiting expert panels for the remaining conditions.

#### 02-059 Survey of Renal Dialysis Centers

**Project Officer:** Mary Stojak

Period: September 2002–February 2003
Awardee: University Renal Research and

Education Association

**Funding:** \$145,844

**Description:** The purpose of the task order is to measure the amount and quality of nutrition therapy that is currently being provided to beneficiaries receiving dialysis.

## 00-064 Evaluation of Community Nursing Organization (CNO) Demonstrations, Phase II

**Project Officer:** Victor McVicker

**Period:** September 2000–September

2002

Awardee: Abt Associates Funding: \$246,367

**Description:** This project evaluates the design and implementation of Phase II of The Community Nursing Organization (CNO) Demonstration. The Phase I evaluation covers the initial period of operation of the demonstration. The Phase II evaluation provides for longer term followup of early participants and also includes an assessment of the effects of the CNO intervention on later participants whose data were not available for Phase I evaluation. The Phase II evaluation requires the use of hierarchical-coexistingconditions risk adjusted estimates of Medicare expenditures for Medicare beneficiaries who participated in the demonstration, as well as for a new comparison group. The calculation of the risk adjuster scores is being contracted separately and the resulting data will be made available to this Phase II evaluation.

**Status:** The demonstration has been extended several times, most recently by section 532 of the Balanced Budget Refinement Act (BBRA) of 1999, which extended the demonstration through December 2001, and mandated an additional evaluation of the demonstration. Section 632 of the Benefits Improvement and Protection Act of 2000 replaced the mandated evaluation required by section 532 of BBRA



with a preliminary report due to Congress by July 2001 and a final report to Congress by July 2002.

## 98-234 Decisionmaking in Managed Care Organizations

**Project Officer:** Brigid Goody

Period: July 1998–August 2002 Awardee: Health Economics Research

**Funding:** \$257,749

**Description:** This task order examines a broad range of managed care decision-making strategies, their implications for the development and diffusion of new technologies and their impact on future health care costs, especially Medicare program costs. The project had three phases. First, case studies of managed-care organizations focused on components of plan decisionmaking related to the scope of insurance coverage: benefits offered, premium and coinsurance structure, and coverage of specific technologies. Second, it examined how the research and development decisions of private firms are affected by increased managed care penetration. Third, it developed a conceptual framework for simulating the long term growth in health care expenditures, especially Medicare program costs, which incorporates the interaction between increased managed care penetration and the research and development process.

Status: A final report presenting findings from the interviews with managed care organizations, contracting hospitals and research and development companies has been received. They found that, while managed care plans attempt to control use of certain technologies, their ability to do so is more restricted than expected. Similarly, managed care undoubtedly influences manufacturer research-and-development investment decisions through coverage and payment policies. It is, however, not clear that it has changed the likelihood that cost-increasing technologies will come to market, nor has it altered the fundamental feedback relationship among insurance, technological innovation, and health care expenditure growth.

#### 00-123 Data Collection to Support Policy Analysis of Choices Offered to Medicare+Choice Enrollees and Choices Made by Enrollees

**Project Officer:** Carlos Zarabozo

Period: September 2000–July 2002

Awardee: Actuarial Research Corporation

**Funding:** \$140,185

**Description:** This project collects data from Medicare+Choice (M+C) organizations regarding the benefits offered to enrollees of M+C plans and the choices that Medicare beneficiaries make as M+C enrollees. The project will collect information about:

1) The number of Medicare beneficiaries in each M+C organization whose M+C benefit package is supplemented or paid for by a (former) employer or union, and how the benefit offerings of employment-based Medicare retiree coverage compare to the benefit offerings of individual Medicare enrollees of the organization; and 2) The choices made by current and new enrollees when the M+C organization offers multiple benefit packages in a particular county.

**Status:** The survey was fielded in January of 2002, with results available June of 2002.

## 02-082 Refinement of Risk Adjustment for Special Populations

Project Officer:Ronald LambertPeriod:August 2002-July 2004Awardee:Health Economics Research

**Funding:** \$399,740.44

**Description:** This project will review and evaluate potential risk adjusters and develop a preliminary payment approach for frail populations. One of the purposes of this contract modification is to refine and further develop frailty adjustment. In 2000, CMS implemented a risk adjustment methodology that uses hospital inpatient diagnoses, and pays Medicare+Choice (M+C) organizations a blend of 10 percent of the risk adjustment amount and 90 percent of the previous demographic payment amount. The payment approaches under consideration



involve the application of a frailty adjuster in conjunction with the inpatient and ambulatory model that will be used for M+C organizations in 2004.

Status: CMS is considering implementing frailty adjustment for demonstrations and PACE in 2004. Prior to implementation, CMS will be sharing information with the demonstrations, PACE, and other interested parties and pursuing clearance through the Office of Management and Budget (OMB) and the Department of Health and Human Services. Refinements and further development will be necessary to reflect more recent research or changes in policy direction. This is a modification to existing contract with Health Economics Research (HER, #500-99-0038).

