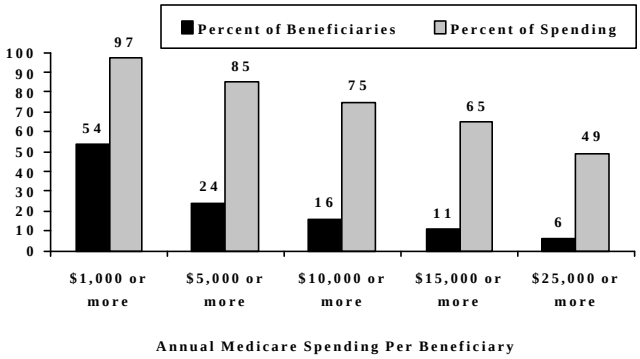
Theme 3: Improving Fee-For-Service Payment and Delivery

CMS is working to ensure a wide range of high-quality health care options for Medicare beneficiaries. Improving fee-for-service payment and delivery involves activities that support efforts to modernize the program and explore how Medicare can adopt successful innovations of private purchasers. We test approaches that provide opportunities and appropriate incentives for coordination of complex care and that reward cost-effective decisions on the part of beneficiaries and providers. CMS projects include: coordinated care models, prospective payment for post-acute care services, payment systems focused on vulnerable populations, implementing and evaluating the durable medical equipment consumer direct purchasing demonstration, aligning hospital and physician incentives by using an all inclusive payment for hospital and physician services, competition-based payment models, bonus payments for health care groups, preferred provider arrangements, evaluating the graduate medical education payment alternative demonstration, assessing the impact of private contracting on beneficiaries and providers, evaluating work and practice expense of physicians, and evaluating rural telemedicine projects.

Six Percent of Beneficiaries Account for Nearly 50 Percent of Program Spending



Source: *CMS, Office of Information Services: Data from the Medicare Decision Support Access Facility; data development by the Office of Research, Development, and Information.*

02-064 **Evaluation of Programs of Disease Management (Phase I and Phase II)**

Project Officer: Carol Magee
Period: September 2002–September 2007
Awardee: Mathematica Policy Research, (DC)
Funding: $1,908,308

Description: The objective of the evaluation is to assess the effectiveness of disease management programs for serious chronic medical conditions such as advanced stage diabetes and congestive heart failure (CHF). Although the participating demonstration sites may also vary by classification of disease severity, the availability of a pharmacy benefit, population targeted, scope of patient care covered, type of comparison group and other factors, they will have in common the goal of improving quality and reducing cost of health care received by chronically ill Medicare beneficiaries through specific services targeted to the management of a particular medical condition. The evaluation will study the independent effects of both the disease management program and a drug benefit as well as any interaction between the two.

Status: RTOP issued to RADSTO Medicare May 16, 2002.

02-066 **Payment Development, Implementation, and Monitoring Support for the Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act (BIPA) Disease Management Demonstrations**

Project Officer: J. Donald Sherwood
Period: September 2002–September 2007
Awardee: Actuarial Research Corporation
Funding: $453,557

Description: The purpose of this task is to support CMS in implementing a demonstration project in three or more sites to provide disease management services to Medicare beneficiaries with advanced stages of congestive heart failure, coronary heart disease, and/or diabetes. Specifically, this project 1) provides general technical support in the analysis of rate proposals and

assistance in calculating the appropriate payment rates (both initial and annual updates) for the selected projects; 2) educates demonstration sites regarding payment calculations, billing processes and requirements, and budget neutrality requirements; 3) monitors payments and Medicare expenditures to assure budget neutrality, including designing data collection processes for use in collecting and warehousing necessary data elements from sites and CMS administrative records for assessing performance; and 4) performs financial analysis to assist in the financial settlement and reconciliation.

98-256 **Medicare Clinical Laboratories Competitive Bidding Demonstration Planning and Technical Assistance**

Project Officer: Michael Park
Period: September 1998–September 2002
Awardee: Research Triangle Institute, (DC)
Funding: $883,568

Description: The project evaluates Part B laboratory test charges in order to calculate a relative value scale. This is a first step toward the development of a process for refining the fee schedule. The development of a final relative value scale is beyond the scope of this study. The current project work is limited to analyzing current laboratory charge data to help inform potential policies.

Status: This project was initially intended to provide support in the implementation and operation of the clinical lab competitive bidding demonstration, and the development and evaluation of models for bidding of Part B services other than physician services, lab services, and durable medical equipment. The focus of the study is in response to the Institute of Medicine report entitled "Medicare Laboratory Payment Policy: Now and in the Future."

01-111 **Environmental Scan for Selective Contracting Practices with Efficient (Qualified) Physicians and Physician Group Practices; Profiling Techniques; Incentive Payments and Barriers to Selective Contracting**

Project Officer: Benson Dutton
Period: September 2001–March 2003
Awardee: Health Economics Research
Funding: $303,803

Description: This project undertakes an environmental scan of physician service payers/employers to identify (a) recent fee-for-service payer and managed care plan selective contracting arrangements with efficient/high quality physicians and physician-group practices; (b) best practice profiling methodology/criteria used in selective contracting including financial profiling; (c) barriers to selective contracting such as "any-willing-provider" or "freedom- of-choice" laws; and (d) bonus arrangements being paid to high quality physicians. Descriptive and qualitative analyses based on this environmental scan should lead to a recommendation of best practice profiling criteria that identify efficient and qualified physicians and group practices. Quantitative analyses estimate current Medicare (Part B) physician expenditures and simulate possible program savings (losses) from alternative selective contracting policies based on best industry practice found in the environmental scan. The use of physician profiling (quality and economic) by payers and employers in evaluating physicians for the purposes of staff appointment, reappointment, and/or selective contracting has been suggested as an accepted industry practice that would modernize Medicare payment practices. In addition, the use of bonus payments to efficient and high quality physicians to keep Medicare program costs down and quality of service up is cited as another industry practice appropriate for modernization of Medicare.

Status: The contractor presented work on research methods and examples of private sector physician efficiency profiling at the Diagnostic Cost Group conference in Boston.

96-081 **Evaluation of Group-Specific Volume Performance Standards Demonstration**

Project Officer: John Pilotte
Period: September 1996–September 2002
Awardee: Health Economics Research
Funding: $2,220,440

Description: The purpose of this task order is to comprehensively evaluate the Group-Specific Volume Performance Standards Demonstration. Additionally, there is a group of tasks to provide technical support for setting sites' targets and measuring their actual performance. The goal of the demonstration is to test the feasibility of this partial-risk-bearing payment arrangement between CMS and qualifying physician-based organizations in the fee-for-service (FFS) market, whereby FFS rules apply within the context of a performance target, beneficiaries are not enrolled, and physician-sponsored organizations develop structures and processes to manage the services and cost of care received by FFS patients.

Status: In developing the final design parameters of the GVPS demonstration, simulations were conducted to analyze low and high expenditure outliers, eligibility mix changes, components of growth rates by type of service, and effects of case-mix adjustments. These analyses reveal sources of variability in growth rates, and support development of options for setting targets and calculating updates and bonus payments. The evaluator is awaiting the initiation of the demonstration.

00-117 **Evaluation of the Informatics, Telemedicine, and Education Demonstration**

Project Officer: Carol Magee
Period: September 2000–July 2004
Awardee: Mathematica Policy Research, (Princeton); Urban Institute
Funding: $1,419,493

Description: The Balanced Budget Act of 1997 mandates a single, 4-year demonstration project using an eligible health care provider telemedicine network. The demonstration involves the application of high-capacity computing and advanced telemedicine networks to the task of improvement of primary care and prevention of health complications in Medicare beneficiaries with diabetes mellitus. This project evaluates the impact of using telemedicine and medical informatics on improving access of Medicare beneficiaries to health care services, on reducing the costs of such services, and on improving the quality of life of beneficiaries. The Informatics, Telemedicine, and Education Demonstration project uses specially modified home computers, or home telemedicine units (HTU) linked to a Clinical Information System (CIS), and studies beneficiaries residing in medically under-served rural or medically under-served inner-city areas. The HTUs in patients' homes allow video conferencing, access to health information, and access to medical data, in both Spanish and English. The demonstration project is being conducted as a randomized, controlled clinical trial. Impact of the telemedicine intervention on health outcomes will be evaluated by comparing health outcome measures of the intervention group to a control group.

Status: This evaluation began in November 2001. The evaluator and the demonstration consortium are arranging for the initial site visits and personnel interviews in order to accomplish the descriptive component of this evaluation. Over the last year, CMS and the Columbia Consortium have been negotiating the details surrounding data-sharing, site-access, and publication rights.

00-166 **Informatics, Telemedicine, and Education Demonstration**

Project Officer: Lawrence Kucken
Period: February 2000–February 2004
Awardee: Columbia University
Funding: $17,356,211

Description: The project focuses on Medicare beneficiaries with diabetes because of the high prevalence, cost, and complexity of this condition. It also focuses on beneficiaries living in Federally-designated medically-underserved areas in order to demonstrate that obstacles to bridging the "digital

divide" in health care are not intrinsic to the targeted population. The project involves a consortium of health care delivery organizations in New York City (urban component) and upstate New York (rural component); industry partners who are providing hardware, software, technology, and communication services; and the American Diabetes Association, which is providing the educational website for the project. The consortium is led by Columbia University. Intervention participants receive a home telemedicine unit which facilitates uploading of clinical data, interaction with a nurse case manager, and patient education.

Status: The experience to date indicates that large scale home telemedicine as a strategy for disease management is technically feasible, can be done in a fashion that meets current requirements for health care data security, and is highly acceptable to those who agreed to participate in this study. No evidence has been found to indicate that Medicare beneficiaries living in federally-designated, medically-underserved areas are unable or unwilling to use computers or the World Wide Web to obtain health care information and health care services.

95-023 **Maximizing the Effective Use of Telemedicine: A Study of the Effects, Cost Effectiveness, and Utilization Patterns of Consultation via Telemedicine**

Project Officer:	Joel Greer
Period:	September 1995–September 2002
Awardee:	Center for Health Policy Research, University of Colorado
Funding:	$2,198,968

Description: This project is evaluating the medical effectiveness, patient and provider acceptance, and costs associated with telemedicine services, as well as their impact on access to care in rural areas. The demonstration involves ten rural hospitals, one rural referral hospital, and one urban hospital. Planned services for the demonstration include interactive video consults for teleradiology, telepathology, and, where available, telesonography, electrocardiography, and fetal monitoring strips. Payment for related physician services is expected to be made under a waiver of Medicare payment regulations. The goal of the project is to evaluate whether specialty telemedicine services provided by hospital networks produce change with respect to medical effectiveness, patient and provider satisfaction, cost, and access. Hypotheses include telemedicine improving differential diagnoses and treatment, patients and providers being as satisfied with telemedicine as with on-site services, telemedicine services being less costly than on-site services, and telemedicine improving access to a wider range of health care services.

Status: A revised OMB approval was obtained, valid until June of 2001. Additional research projects are being considered. The demonstration to be evaluated encountered significant problems and this forced the evaluator to revise their approach.

00-113 **Evaluation of Programs of Coordinated Care and Disease Management**

Project Officer:	Amy Knight
Period:	September 2000–September 2005
Awardee:	Mathematica Policy Research, (DC)
Funding:	$3,018,839

Description: This project evaluates a group of Congressionally mandated demonstration programs and two Agency-initiated demonstration programs. The demonstrations test various methods of managing care in the fee-for-service (FFS) Medicare environment. Demonstration of the effectiveness of programs of care coordination or management are complicated, not only by wide variations in program staff, funding mechanisms, interventions and stated goals, but by the evaluator's definition(s) of effectiveness. CMS is investigating the potential of care coordination or case management to improve care quality and control costs in the Medicare FFS program. Under the Balanced Budget Act of 1997, a demonstration of approaches to coordinated care of chronic illnesses in up to nine separate sites is required. An evaluation of best practices in coordinated care and a study of demonstration design options was conducted.

A separate demonstration, the Medicare Case Management Demonstration, focuses on programs of case management specific to diabetes and congestive

heart failure. This evaluation assesses the effectiveness of various strategies for coordinating care in the FFS Medicare environment, in a total of 11 demonstration sites. The participating demonstration sites vary by: corporate structure, types of medical conditions addressed, scope of patient care covered, beneficiary eligibility, and source of comparison data.

Status: The contractor is working with the demonstration sites to finalize randomization procedures and is completing the design of the patient and physician surveys in preparation for submitting an OMB approval package.

00-082 **Implementation Support for the Medicare Coordinated Care Demonstration**

Project Officer: Cynthia Mason
Period: September 2000–March 2005
Awardee: KPMG Consulting
Funding: $2,012,184

Description: This project provides CMS with technical monitoring and assistance in project implementation and operation of the Medicare Coordinated Care Demonstration. The demonstration tests models of coordinated care (case management and disease management) that seek to improve the quality of services provided to beneficiaries who have a chronic illness and manage expenditures of the Medicare program.

Status: This support contract is meeting with sites and conducting training sessions on billing and cost reporting.

99-068 **Aging in Place: A New Model for Long-Term Care**

Project Officer: Barbara Silverman
Period: June 1999–June 2003
Awardee: Curators of the University of Missouri, Office of Sponsored Program Administration, University of Missouri - Columbia, Sinclair School of Nursing
Funding: $2,000,000

Description: The goal of the "Aging in Place" model of care for frail elderly is to allow elders to remain in their homes as they age, rather than requiring frequent moves to allow for more intensive care if and when it becomes necessary. Although a planned element of the program is a new senior housing development, the program currently targets elderly residents of existing congregate housing.

Status: As a result of changes to the study plan, the applicant requested an increase in the first-year award with a corresponding reduction in the Years 2-4 awards and no change in the total budget. This change was approved.

COORDINATED CARE TO IMPROVE QUALITY OF CARE FOR CHRONICALLY ILL MEDICARE BENEFICIARIES

This demonstration is testing whether coordinated care programs can improve medical treatment plans, reduce avoidable hospital admissions, and promote other desirable outcomes among certain beneficiaries that constitute a small proportion of the Medicare fee-for-service (FFS) population, but account for a major proportion of Medicare expenditures. It is one of 15 sites selected as a part of a pilot project to provide case management and disease management services to certain Medicare FFS beneficiaries with complex chronic conditions. This project and the other 14 will allow CMS to test a wide range of programs aimed at reducing costs and increasing quality of care for chronically ill Medicare FFS beneficiaries. The Balanced Budget Act of 1997 (BBA) authorizes this demonstration to test existing models of coordinated care interventions to improve the quality of services provided to certain chronically ill beneficiaries and manage expenditures to the Medicare program. The Act requires that the projects target chronically ill Medicare FFS beneficiaries that are eligible for both Medicare Parts A and B and requires that the projects' payment methodology be budget neutral.

01-042 **Coordinated Care to Improve Quality of Care for Chronically Ill Medicare Beneficiaries–Washington, DC**

Project Officer: John Pilotte
Period: February 2001–January 2006
Awardee: Georgetown University
Funding: $0

Status: Implementation began in early 2002.

01-040 **Coordinated Care to Improve Quality of Care for Chronically Ill Medicare Beneficiaries–Pennsylvania**

Project Officer: Michael Park
Period: February 2001–March 2006
Awardee: Health Quality Partners
Funding: $0

Status: Implementation began in early 2002.

01-028 **Coordinated Care to Improve Quality of Care for Chronically Ill Medicare Beneficiaries–Maine**

Project Officer: Sidd Mazumdar
Period: February 2001–January 2006
Awardee: Medical Care Development
Funding: $138,720

Status: Implementation began in early 2002.

01-029 **Coordinated Care to Improve Quality of Care for Chronically Ill Medicare Beneficiaries–Mahomet, Illinois**

Project Officer: Dennis Nugent
Period: February 2001–January 2006
Awardee: Carle Foundation Hospital
Funding: $149,943

Description: This demonstration site works with the Carle Foundation Hospital of Mahomet, Illinois. It implements a rural case management program targeting beneficiaries with various chronic conditions in eastern Illinois.

Status: Implementation began in early 2002.

01-032 **Coordinated Care to Improve Quality of Care for Chronically Ill Medicare Beneficiaries–Florida**

Project Officer: Kathy Headen
Period: February 2001–January 2006
Awardee: Quality Oncology, Inc.
Funding: $63,000

Description: This demonstration site works with Quality Oncology, Incorporated of McLean, Virginia. It implements an urban disease management program focusing on beneficiaries with cancer in Broward County, Florida

Status: Implementation began in early 2002.

01-031 **Coordinated Care to Improve Quality of Care for Chronically Ill Medicare Beneficiaries–Richmond, Virginia**

Project Officer: Cynthia Mason
Period: February 2001–January 2006
Awardee: CenVaNet
Funding: $75,448

Description: This demonstration site works with CenVaNet, Incorporated of Richmond, Virginia. It implements an urban case management program targeting beneficiaries with various chronic conditions in Richmond.

Status: Implementation began in early 2002.

01-041 **Coordinated Care to Improve Quality of Care for Chronically Ill Medicare Beneficiaries–South Dakota**

Project Officer: Sidd Mazumdar
Period: February 2001–January 2006
Awardee: Avera McKennan Hospital
Funding: $0

Status: Implementation began in early 2002.

01-039 **Coordinated Care to Improve Quality of Care for Chronically Ill Medicare Beneficiaries–New York, NY**

Project Officer: Dennis Nugent
Period: February 2001–January 2006
Awardee: The Jewish Home and Hospital for the Aged
Funding: $150,000

Description: This demonstration site works with The Jewish Home and Hospital for the Aged. It implements an urban case management program targeting beneficiaries with various chronic conditions in New York City.

Status: Implementation began in early 2002.

01-037 **Coordinated Care to Improve Quality of Care for Chronically Ill Medicare Beneficiaries–Houston, Texas**

Project Officer: John Pilotte
Period: February 2001–January 2006
Awardee: CorSolutions Medical, Inc.
Funding: $82,350

Status: Implementation began in early 2002.

01-036 **Coordinated Care to Improve Quality of Care for Chronically Ill Medicare Beneficiaries–University of Maryland**

Project Officer: Dennis Nugent
Period: February 2001–January 2006
Awardee: University of Maryland, School of Medicine
Funding: $0

Description: This demonstration site works with the University of Maryland School of Medicine. It implements an urban disease management program targeting beneficiaries with congestive heart failure in Baltimore, Maryland.

Status: Implementation began in early 2002.

01-035 **Coordinated Care to Improve Quality of Care for Chronically Ill Medicare Beneficiaries–Baltimore, Maryland**

Project Officer: Kathy Headen
Period: February 2001–January 2006
Awardee: Erickson Retirement Community, Inc.
Funding: $45,100

Description: This demonstration site works with Erickson Retirement Communities, Incorporated. It implements an urban case management program targeting beneficiaries with congestive heart failure, coronary artery disease, hypertension, or diabetes living at Charlestown and Oak Crest Village Retirement Communities located in Baltimore County, Maryland

Status: Implementation began in early 2002.

01-034 **Coordinated Care to Improve Quality of Care for Chronically Ill Medicare Beneficiaries–Massachusetts**

Project Officer: Michael Park
Period: February 2001–January 2006
Awardee: Washington University Physician Network
Funding: $150,000

Status: Implementation began in early 2002.

01-033 **Coordinated Care to Improve Quality of Care for Chronically Ill Medicare Beneficiaries–Iowa**

Project Officer: Sidd Mazumdar
Period: February 2001–January 2006
Awardee: Mercy Medical Center - North Iowa
Funding: $50,000

Status: Implementation began in early 2002.

01-030 **Coordinated Care to Improve Quality of Care for Chronically Ill Medicare Beneficiaries–Arizona**

Project Officer: Michael Park
Period: February 2001–January 2006
Awardee: Hospice of the Valley
Funding: $0

Status: Implementation began in early 2002.

01-038 **Coordinated Care to Improve Quality of Care for Chronically Ill Medicare Beneficiaries–Northern California**

Project Officer: John Pilotte
Period: February 2001–January 2006
Funding: $150,000
Awardee: QMED

Status: Implementation began in early 2002.

01-222 **Implementation Support for the Medicare Participating Centers of Excellence Demonstration**

Project Officer: Raymond Wedgeworth
Period: September 2001–March 2005
Awardee: Barents Group
Funding: $379,991

Description: The purpose of this project is to assist CMS in the implementation of the Quality Partnerships Demonstration project. Under this demonstration, CMS selects premier cardiovascular and orthopedic programs and gives a bundled Part A & Part B payment (global payment) for all inpatient facility and physician services related to specific DRGs. Implementation support includes: 1) calculating the appropriate payment rates (both initial and annual updates); 2) developing the Office of Management and Budget (OMB) waiver cost estimate; 3) educating demonstration sites regarding payment calculations, 4) planning and implementing a pre-demonstration implementation conference, and 5) providing general technical support to CMS in carrying out the demonstration.

Status: This newly initiated project is in the startup phase.

01-112 **Quality Monitoring for the Medicare Participating Center of Excellence Demonstration**

Project Officer: Jody Blatt
Period: September 2001–December 2005
Awardee: Abt Associates
Funding: $735,160

Description: The purpose of the quality monitoring project is to develop a quality monitoring process that meets the general goals of various global payment demonstrations including the Medicare Partnerships for Quality Cardiovascular Services and Medicare Partnerships for Quality Total Joint Replacement Services ("Quality Partnerships" for short and formerly referred to as the "Medicare Participating Centers of Excellence Demonstration") and, subsequently, to coordinate and implement that process. The process incorporates the identification and technical definition of appropriate performance measures, collection of data in a centralized database, the development and distribution of reports to provide meaningful information back to demonstration participants and CMS, and coordination of the quality consortia meetings and conferences. The Quality Partnerships Demonstration involves bundled Part A & Part B payments to premier cardiovascular and orthopedic facilities for selected procedures. The selected cardiovascular and orthopedic procedures include coronary artery bypass surgery, cardiac valve procedures, angioplasty, and knee and hip replacements. We expect that the use of global payments will align the incentives for efficiency between the hospitals and the physicians, thereby enhancing not only the efficiency, but the clinical quality of services. All of the selected demonstration sites are invited to participate in a specialty-specific "quality consortia" that develops quality criteria and quantitative measures for monitoring performance during the demonstration.

Status: As of December 2001, the contractor is preparing to submit the required reports on performance measurement for cardiovascular and total

joint replacement procedures. They are also preparing a survey for demonstration sites regarding current system capabilities and relevant data collection activities. This contract will also be used to support other global payment and related demonstrations including the Provider Partnerships Demonstration and the New Jersey Hospital Association Demonstration. However, work related to these latter two demonstrations is on hold pending agency approval to proceed with implementation of the demonstrations.

02-051 **Evaluation of the Medicare Preferred Provider Organization (PPO) Demonstration (Phase I and Phase II)**

Project Officer: Victor McVicker
Period: September 2002–September 2007
Awardee: Research Triangle Institute, (DC)
Funding: $1,463,493

Description: The purpose of this project is to evaluate the Medicare Preferred Provider Organization (PPO) demonstration. A comprehensive evaluation will include a case study component to examine issues pertaining to the implementation and operational experiences of the PPOs as well as statistical analyses of secondary data, including individual level data, to examine issues of biased selection, and impacts on the use and cost of services. Primary data will be collected through site visits to participating plans and beneficiary surveys.

Status: Phase I (2002-2005), Phase II (2006-2007).

96-057 **Case-Mix Adjustment for a National Home Health Prospective Payment System**

Project Officer: Ann Meadow
Period: July 1996–May 2002
Awardee: Abt Associates
Funding: $3,955,955

Description: The primary focus of this study is to understand existing variation in home health resource patterns and to use this information to develop a case-mix adjuster for a national home health prospective payment system (PPS). Elements from the Outcome and Assessment Information Set (OASIS), which has been developed for quality improvement in Medicare home health agencies, are analyzed for their usefulness as measures within a case mix adjustment model. Additional detailed information, including information on resource utilization, has been collected from participating agencies. Ninety agencies were recruited and trained from eight States (Arkansas, California, Florida, Illinois, Massachusetts, Pennsylvania, Texas, Wisconsin) in the spring and summer of 1997. Data collection began in October 1997 and ended in the spring of 1999.

Status: The resulting case mix adjuster was incorporated in the Medicare home health PPS, which was implemented in October 2000. Selected OASIS items, collected at the start of each 60-day payment episode, are used for patient classification. An additional item on therapy utilization was added for purposes of the case mix model. The items fall into three major domains: clinical factors, functional-status factors, and utilization factors. Under modifications to the original contract, the project assumed additional tasks to 1) develop and test home health PPS grouper software, 2) provide technical assistance for setting PPS rates, 3) design and assist CMS in implementing an OASIS verification protocol for use by regional home health fiscal intermediaries, and 4) develop data and conduct analyses to refine the initial case mix model. Results of the study to date are available.

00-023 **Direct and Indirect Effects of the Changes in Home Health Policy and an Analysis of the Skill Mix of Medicare Home Health Services Before and After the Balanced Budget Act of 1997**

Project Officer: Sydney Galloway
Period: March 2000–September 2003
Awardee: Laguna Research Associates
Funding: $24,298

Description: This project provides partial support for a project primarily funded by the Robert Wood Johnson Foundation (RWJ). As part of this larger project, CMS supplies needed data and receives the results of a special study. The major (RWJ) project examines three areas where impacts of the Balanced Budget Act of 1997 (BBA) might fall: the Medicare beneficiary, home health care agencies, and the overall

medical and long-term care system. Analysis based on the data CMS supplies under this award, taken together, will help understand the overall pattern of impacts and be useful in formation of future reimbursement policy. The special study for CMS looks at beneficiary access. This will analyze pattern of Medicare home health use before and after the implementation of the BBA. There is a focus on assessing whether changes occurred in the skill mix of types of visits received by home health users. It will examine whether differential effects have occurred for different categories of home health users and in different geographic areas.

Status: The data are being accessed after considerable delay at CMS. They are being prepared for analysis as of December 2000. Because of this delay in access to the information, the project was extended through March 2002.

94-087 **Maximizing the Cost Effectiveness of Home Health Care: The Influence of Service Volume and Integration with Other Care Settings on Patient Outcomes**

Project Officer: Ann Meadow
Period: September 1994–September 2002
Awardee: Center for Health Policy Research, University of Colorado
Funding: $1,496,245

Description: This study examines how to integrate home health care (HHC) with care in other settings to reduce overall health care costs. The central hypotheses of this study were that volume-outcome relationships are present in HHC for common patient conditions, that upper and lower volume thresholds exist that define the range of services most beneficial to patients, and that a strengthened physician role and better integration of HHC with other services during an episode of care can optimize patient outcomes while controlling costs. A sample of patient records were analyzed from agencies in 20 States stratified into high, medium, and low-volume categories based on annual visits per beneficiary, and patient health status and service information between HHC admission and discharge to assess patient outcomes and costs within the HHC episode was recorded. Long-term, self-reported outcomes were measured from telephone interview data at HHC admission and from 6-month followups. These primary data concerning patient status and outcomes were combined with Medicare claims data over the episode of care to study the relationship between service volume in HHC and both patient outcomes and costs.

Status: Four common conditions (congestive heart failure, stroke, surgical hip procedures, and open wounds) were studied. Two-sample tests for mean differences in case mix characteristics and volume were performed to compare the two volume groups within each condition. The median volume (defined as number of visits until discharge or first inpatient admission) differed by a factor of about four to nine, depending on the condition. For home health aide services, mean volume differed by a factor of between 30 and 47. Limitations in activities of daily living (ADLs) were significantly greater for the high-volume groups, these patients had a greater prevalence of chronic conditions, and their institutional utilization within the 14 days prior to admission was less likely to be an acute-care hospital, indicating the more post-acute nature of the low-volume groups. This general case mix difference is consistent with the greater use of aide services for high-volume patients. Preliminary analyses of outcomes suggested relatively few differences in outcomes by volume, after controlling for condition. This result may mean that the additional services delivered to the high-volume group helped equalize outcomes between more severely ill and less severely ill patients.

01-233 **Studies in Home Health Case Mix**

Project Officer: Ann Meadow
Period: September 2001–December 2005
Awardee: Abt Associates
Funding: $739,713

Description: The purpose of this project is to further develop the case mix model used for the home health PPS system implemented in October 2000, and to explore new approaches to case mix adjuster development. Some of the results may have near- or medium-term application to CMS rulemaking for Medicare home health payment because they are

essentially extensions of the current model. Other results are not necessarily extensions of the current model and, therefore, might find application in the longer-term future. All work will be conducted using existing administrative databases.

Status: The project is in the early developmental stages.

99-057 **Evaluation of Issues Related to Prospective Payment System under Consolidated Bidding for Skilled Nursing Facilities and Home Health Agencies**

Project Officer: Cindy Murphy
Period: August 1999–June 2003
Awardee: Jing Xing Technologies
Funding: $938,370

Description: This project provides analytical support for CMS on operating issues (claims processing, medical review (MR) and data processing) for providers and contractors (intermediaries, carriers, and Durable Medical Equipment Regional Carriers (DMERC)) related to implementation of skilled nursing facility (SNF) Part A prospective payment system (PPS) consolidated billing under Parts A and B, and implementation of the new SNF Part B fee schedule.

Status: The report is available.

00-090 **Behavior Validation to Decrease Problem Behaviors of Elderly with Advanced Dementia**

Project Officer: Dennis Nugent
Period: September 2000–January 2002
Awardee: University of Missouri - Kansas City, Office of Research Administration
Funding: $250,000

Description: This project studies the effect of using behavior validation strategies to manage problem behaviors of nursing home elderly with dementia of the Alzheimer's type (DAT). The objectives are to determine if a program of behavior validation, used by nursing home caregivers, will decrease residents' behavior problems, and to explore the feasibility of integrating this program into orientation and staff education. The usual course of DAT disease progression is associated with problem behaviors (disruptive, inappropriate, and agitated), which occur in 20-90 percent of nursing home residents depending on the level of dementia. These behaviors are expensive in that they cause harm to staff and other residents; increase the use of chemical and physical restraints; increase staff dissatisfaction, absenteeism and turnover rates; and can even result in property damage. While some behavior management interventions have been shown to be effective, they are underutilized. Behavior validation consists of verbal and nonverbal responses to a behavior problem to calm the resident and redirect the behavior into one that is more favorable. Behavior education for staff addresses characteristics of problem behaviors and actions that are effective in behavior management.

Status: The project is complete and the final report is being drafted. The Principal Investigator has indicated that the report will be ready at the end of the award period.

97-005 **Rebasing Prospective Payment System and Exempt Hospital & Skilled Nursing Facility Input Price Indices from Newly Available Sources**

Project Officer: Stephen Heffler
Period: February 1997–September 2002
Awardee: Jing Xing Technologies
Funding: $592,265

Description: This project assists in the rebasing of the prospective payment system (PPS) and exempt hospital input price indexes, and the skilled nursing facility (SNF) input price indices using data from newly available sources. It will also assist in the study of the relationships between different health care payers in different health care settings and a determination of alternative methodologies for updating Medicare payments using prices, productivity, technology, and demographics. For the National Health Accounts, it will assist in the development of a time series of annual capital expenditures of fixed and movable equipment and a time series of annual expenditures for nursing home care and home health care in hospital-based

nursing facilities and hospital-based home health agencies (HHAs).

Status: Most tasks have been completed, including rebasing the PPS and SNF input price indexes, estimating hospital-based SNF and HHA expenditures, reviewing alternative update methodologies, and using the Medicare Cost reports to estimate hospital payments and expenditures. Work is completed on estimating capital expenditures for the National Health Accounts.

00-067 **Medicare Post-Acute Care: Evaluation of Balanced Budget Act Payment Policies and Related Changes**

Project Officer: Philip Cotterill
Period: September 2000–September 2002
Awardee: MEDSTAT Group (DC)
Funding: $636,557

Description: The purpose of this project is to study the impact of Balanced Budget Act (BBA) and other policy changes on Medicare utilization and delivery patterns of post-acute care. Post-acute care is generally defined to include the Medicare covered services provided by skilled nursing facilities (SNFs), home health agencies, rehabilitation hospitals and distinct part units, long-term care hospitals, and outpatient rehabilitation providers. This initial project will compare changes between the pre-BBA period of the 1990's and the post-BBA year, 1999. The study will include a variety of beneficiary, provider, and market area analyses. Since the impacts of policy changes not yet implemented will continue to be of interest for many years, the analyses developed under this contract are expected to use and refine methods that can be applied in future evaluation research.

Status: Much of the first year of the project was spent constructing data sets.

00-094 **Study of the Impact of Boren Amendment Repeal on Nursing Facility Services for Medicaid Eligibles**

Project Officer: Paul Boben
Period: September 2000–March 2002
Awardee: Brandeis University, Heller Graduate School, Institute for Health Policy
Funding: $268,875

Description: The purpose of this project is to study the impact of the repeal of the Boren Amendment on Medicaid beneficiaries' access to care in a nursing facility (NF), a hospital, or intermediate care facility for the mentally retarded (ICF/MR) and the quality of care available to them in those facilities. The study will examine rate setting methodologies to learn whether States have changed their methods of payment since the repeal of the Boren Amendment and whether these changes have affected access to care or quality of care received by Medicaid beneficiaries.

Status: In July 2001, the contract was modified to incorporate analyses of the impact of repeal of the Boren Amendment on hospitals and ICF/MR, in addition to the existing study focusing on NF. The period of performance was extended to March 30, 2002 to accommodate the additional work. A draft Report to Congress on the impact of Boren Amendment repeal on access to and quality of NF services was received in February 2001. Draft reports on hospitals and ICF/MR are expected by January 2002, and will be submitted to Congress as a follow-up report. A report of a multivariate analysis of the effect of Medicaid payment policies on the NF sector is also expected in 2002.

01-108 **Assessment, Refinement and Analysis of the Existing Prospective Payment System for Skilled Nursing Facilities**

Project Officer: Carolyn Rimes
Period: July 2001–July 2005
Awardee: Urban Institute
Funding: $6,383,566

Description: This project supports CMS in 1) the assessment of the feasibility of refining the current Medicare payment system for skilled nursing facilities and, if feasible, produce analyses that support these refinements and 2) our exploration of different systems for categorizing patients and their resource allocation. It will analyze data and prepare a report containing recommendations for possible revisions to the classification of patients in a manner that accounts for the relative resource use of different patient types. This project focuses only on the Medicare beneficiary population, including those beneficiaries defined as dually eligible.

Status: Phase I focuses on the design and creation of a data base. Phase II analyses support annual refinements to the payment system; and analysis, testing, simulations, and making recommendations regarding potential options for modifying, restructuring, or reconfiguring the existing patient classification and payment system for skilled nursing facilities.

98-239 **Evaluation of Competitive Bidding Demonstration for DME and POS**

Project Officer: Ann Meadow
Period: September 1998–May 2003
Awardee: University of Wisconsin - Madison
Funding: $2,315,249

Description: CMS has mounted a demonstration to test the feasibility and effectiveness of establishing Medicare fees for durable medical equipment (DME) and prosthetics, prosthetic devices, orthotics, and supplies (POS) through a competitive bidding process. The fundamental objective of competitive bidding is to use marketplace competition to establish market-based prices and to select DME suppliers. The Balanced Budget Act of 1997 (BBA) authorized competitive bidding demonstrations for Part B services (except physician services), and the current project is being conducted under that authority. The initial site of the demonstration is Polk County, Florida. A second site, San Antonio, Texas, was selected in 2000. Competitively bid product categories in Polk are oxygen supplies and equipment, hospital beds, enteral nutrition, surgical dressings, and urological supplies. Product categories in Texas are oxygen supplies and equipment, hospital beds, manual wheelchairs, nebulizer drugs, and non-customized orthotics. Medicare contracts with winning suppliers in Polk County commenced in October 1999, and San Antonio contracts commenced in February 2001.

Status: A pre-demonstration survey of oxygen users and users of other medical supplies was fielded in two Florida counties (Polk and Brevard) in March 1999. The results suggested beneficiaries were highly satisfied with the services and products delivered by their Medicare suppliers. A followup survey, fielded in CY 2000, will provide data for the pre-test/post-test comparison design analyzing the impact of the demonstration in Polk County. The evaluation team conducted five site visits to Polk County in 1999 and 2000 as part of the project's case study activities addressing access, quality, and administrative and market outcomes. A baseline survey in two Texas areas, San Antonio and Austin-San Marcos, was fielded in 2000, and an initial site visit to Texas was conducted in late 2000. Other evaluation activities include claims analyses, focus groups, fee-schedule analyses, and additional surveys. The first annual evaluation report to Congress is scheduled for release in early CY 2001. A paper analyzing the responses to the Polk County baseline survey has been submitted for publication.

98-252 **Evaluating the Use of Quality Indicators in the Long Term Care (LTC) Survey Process**

Project Officer: Lisa Hines
Period: September 1998–September 2003
Awardee: Research Triangle Institute, (NC)
Funding: $3,934,228

Description: This project will evaluate how to integrate quality indicators into the regulatory process. Quality indicators could be used for monitoring and assessing facility performance in numerous domains and supporting appropriate corrective and enforcement actions. This task order will develop and test various options for using a variety of quality indicators to improve the effectiveness and efficiency of CMS's monitoring of facility performance.

Status: The project team is currently testing the computerized system in field tests. An alpha test of the system is planned for spring 2002 using CMS and State Survey team staff. Development and incorporation of investigative protocols will occur through the summer of 2002. Beta testing of the completed system is planned for Fall 2002.

94-131 **Randomized Controlled Trial of Primary and Consumer-Directed Care for Persons with Chronic Illnesses**

Project Officer: Tamara Jackson-Douglas
Period: September 1994–December 2002
Awardee: Monroe County Long Term Care Program, Inc.
Funding: $96,498

Description: This demonstration project was designed to determine the cost and effectiveness of providing consumer-directed care on the health status, quality of life, cost, and service use of community-dwelling Medicare beneficiaries who are chronically ill, functionally impaired, and at high risk for repeated hospital admissions. The demonstration uses three treatment models to test how well different models of care empower and inform the patient to make decisions on health care that are more cost-effective and lead to improved or sustained health outcomes. Outcomes are measured by hospital utilization; total health and long-term care costs; health and functional status; problematic behaviors; quality of life; caregiver stress and burden; and patient, caregiver, and physician satisfaction. This demonstration is located in two geographic areas: Monroe County, New York, and the mid-Ohio valley, which includes portions of northern West Virginia and southern Ohio.

Status: The project was originally approved in 1994; however, waivers were not approved for the three intervention groups until April 1997 due to the lengthy process of defining and re-defining the design of the demonstration. Although sites began enrolling patients in late 1996, enrollment did not begin in earnest until after the final waiver approval was secured, and full enrollment of the required 1600 chronically ill Medicare beneficiaries was not achieved until June 2000. Based on the 24-month treatment period, the last enrollees are to receive service through June 2002. Funding for the project concludes in December 2002, after six months of phase-down activities for the investigator teams, including final data analysis and report generation.

This project was granted several extensions in the past to account for delays associated with startup. In late 2001, the project's principal investigators requested an additional 12 months of waivered services and an additional $1.5 million to complete their evaluation. Their request was not approved.

CONSUMER DIRECTED DURABLE MEDICAL EQUIPMENT DEMONSTRATIONS

These demonstrations support the United States Department of Education's "Center for Independent Living" projects. A Center for Independent Living is a local consumer-led organization devoted to helping people with disabilities live and work within their communities. This CMS demonstration effort helps Medicare beneficiaries with disabilities exercise greater choice and control in meeting their personal needs for wheelchairs and other durable medical equipment. Goals of the projects include treating individuals with disabilities with dignity, providing the necessary tools to live and work more independently, and assisting people with disabilities to be successfully employed. CMS and the Department of Education will share any innovations and best practices identified under the demonstration projects.

00-050 **Consumer Directed Durable Medical Equipment Demonstration Project**

Project Officer: Paul Mendelsohn
Period: September 2000–August 2004
Awardee: Ability Resources Inc.
Funding: $150,000

Status: As of the fall of 2000 this project was in the early stages.

00-049 **Consumer Driven Durable Medical Equipment Acquisition Program**

Project Officer: Paul Mendelsohn
Period: September 2000–August 2004
Awardee: Center for Independent Living of Southwest Pennsylvania
Funding: $150,000

Status: As of the fall of 2000 this project was in the early stages.

00-051 **Consumer Directed Durable Medical Equipment Demonstration for Beneficiaries with Disabilities**

Project Officer: Paul Mendelsohn
Period: September 2000–August 2004
Awardee: Center for Living and Working
Funding: $150,000

Status: As of the fall of 2000 this project was in the early stages.

01-286 **Medicare Competitive Bidding Demonstration for Durable Medical Equipment, II**

Project Officer: Mark Wynn
Period: August 2001–September 2002
Awardee: Palmetto Government Benefits Administrators
Funding: $715,000

Description: This demonstration project is being implemented to test the feasibility of obtaining lower prices through competitive bidding for selected lines of durable medical equipment, prosthetics, orthotics, and supplies. Suppliers selected as demonstration suppliers are the only ones eligible to receive Medicare payments for supplying the products covered by the demonstration. Demonstrations are being implemented in two metropolitan areas–Polk County, Florida and the San Antonio, Texas Metropolitan Statistical Area (MSA). The supply lines that were offered for competitive bidding at the Florida site are: 1) home oxygen therapy; 2) hospital beds and accessories 3) enteral nutrition therapy; 4) surgical dressings 5) and 6) urological supplies. The supply lines that were offered for competitive bidding at the Texas site are: 1) hospital beds and accessories, 2) home oxygen therapy, 3) manual wheelchairs and accessories, 4) noncustomized orthotics, and 5) nebulizer inhalation drugs.

Status: The first demonstration site became operational in October 1999 in Polk County Florida. Sixteen suppliers were selected as "Demonstration Suppliers" for one or more of the covered product categories. The new rates took effect in October 1999 and remained in effect for 2 years. A second round of bidding took place in Polk County in 2001 to determine the prices for the final year of the project. The second demonstration site became operational in February 2001 in the San Antonio, Texas MSA. The new rates took effect in February, 2001 and will remain in effect through 2002.The average savings at the two demonstration locations was 20 percent, as compared with the Medicare fee schedule.

00-052 **Consumer Directed Durable Medical Equipment Demonstration for People with Physical Disabilities**

Project Officer: Paul Mendelsohn
Period: September 2000–August 2004
Awardee: Alpha One Center for Independent Living
Funding: $150,000

Status: As of the fall of 2000 this project was in the early stages.

99-081 **Developing and Evaluating the Use of a Quality Indicator Format in the End Stage Renal Disease Survey Process**

Project Officer: Judith Kari
Period: September 1999–June 2003
Awardee: Lewin Group
Funding: $466,231

Description: The purpose of this project is to develop, test, and describe improved processes and formats for enhancing the survey process for End Stage Renal

Disease (ESRD) facilities. An improved survey process would include effectively using quality indicators in the survey process, developing more consistent and accurate survey results, and developing more efficient and objective ways to record survey results.

Status: The progress on this project has been suspended since February 2000.

NEW YORK GRADUATE MEDICAL EDUCATION DEMONSTRATION

This demonstration provided incentives for New York State teaching hospitals to reduce their graduate medical residencies by 20 to 25 percent over a 5-year period. The project was expected, over all, to reduce the number of residents and costs to the program. Concerns were that such a reduction would impact access and service delivery as well as having economic and workforce effects.

97-232 **New York Graduate Medical Education Demonstration: Woodhull Medical and Mental Health Center**

Project Officer: Sidd Mazumdar
Period: February 1997–March 2002
Awardee: Woodhull Medical and Mental Health Center
Funding: $0

Description: This site was a participant in a major demonstration that provided incentives for New York State teaching hospitals to reduce their graduate medical residencies by 20 to 25 percent over a 5-year period. This project also spoke to several provisions of the Balanced Budget Act of 1997 (BBA), which were also aimed at reducing annual graduate medical education (GME) spending. Medicare's annual GME spending reached $7 billion, of which nearly 20 percent was for New York teaching hospitals. The project was expected, over all, to reduce the number of residents and, thus, costs to the program. Concerns were that such a reduction would impact access and service delivery as well as have economic and workforce effects.

Status: Woodhull Medical and Mental Health Center withdrew in 2002.

97-261 **New York Graduate Medical Education Demonstration: New York Eye and Ear Infirmary**

Project Officer: Sidd Mazumdar
Period: February 1997–March 2002
Awardee: New York Hospital & Presbyterial Hospital
Funding: $0

Status: New York Eye and Ear Infirmary withdrew in 2002.

97-260 **New York Graduate Medical Education Demonstration: Metropolitan Hospital Center**

Project Officer: Sidd Mazumdar
Period: February 1997–June 2003
Awardee: Metropolitan Hospital Center
Funding: $0

Status: Metropolitan Hospital Center remains in the demonstration.

97-256 **New York Graduate Medical Education Demonstration: Harlem Hospital Center**

Project Officer: Sidd Mazumdar
Period: February 1997–June 2003
Awardee: Harlem Hospital Center
Funding: $0

Status: Harlem Hospital Center remains in the demonstration.

97-254 **New York Graduate Medical Education Demonstration: Westchester Medical Center, Sound Shore Medical Center & Mount Vernon Hospital Joint Project**

Project Officer: Sidd Mazumdar
Period: February 1997–February 2002
Awardee: Westchester Medical Center
Funding: $0

Description: This site was a participant in a major demonstration that provided incentives for New York State teaching hospitals to reduce their graduate medical residencies by 20 to 25 percent over a 5-year period. This project also spoke to several provisions of the Balanced Budget Act of 1997 (BBA) that were also aimed at reducing annual graduate medical education (GME) spending. Medicare's annual GME spending reached $7 billion, of which nearly 20 percent was for New York teaching hospitals. The project was expected, over all, to reduce the number of residents and thus costs to the program.

Status: This was a joint project with Sound Shore Medical Center & Mount Vernon Hospital; however, Westchester and Sound Shore withdrew in March 1999. Only Mount Vernon Hospital remained as of 2002.

97-252 **New York Graduate Medical Education Demonstration: Jacobi Medical Center & North Central Bronx Hospital Joint Project**

Project Officer: Sidd Mazumdar
Period: February 1997–June 2003
Awardee: Jacobi Medical Center
Funding: $0

Description: A joint project of Jacobi Medical Center & North Central Bronx Hospital.

Status: This site was a participant in a major demonstration that provided incentives for New York State teaching hospitals to reduce their graduate medical residencies by 20 to 25 percent over a 5-year period. This project also spoke to several provisions of the Balanced Budget Act of 1997 (BBA), which were also aimed at reducing annual graduate medical education (GME) spending. Medicare's annual GME spending reached $7 billion, of which nearly 20 percent was for New York teaching hospitals. The project was expected, over all, to reduce the number of residents and, thus, costs to the program.

97-250 **New York Graduate Medical Education Demonstration: Mount Sinai Consortium**

Project Officer: Sidd Mazumdar
Period: February 1997–June 2003
Awardee: Mount Sinai Medical Center
Funding: $0

Description: Consortium Members: Cabrini Medical Center, Elmhurst Hospital Center, Mount Sinai Medical Center, and Queens Hospital Center.

Status: This site was a participant in a major demonstration that provided incentives for New York State teaching hospitals to reduce their graduate medical residencies by 20 to 25 percent over a 5-year period. This project also spoke to several provisions of the Balanced Budget Act of 1997 (BBA) that were also aimed at reducing annual graduate medical education (GME) spending. Medicare's annual GME spending reached $7 billion, of which nearly 20 percent was for New York teaching hospitals. The project was expected, over all, to reduce the number of residents and thus costs to the program. Concerns were that such a reduction would impact access and service delivery as well as having economic and workforce effects. Cabrini, Elmhurst, and Mount Sinai withdrew as of March 10, 1999. Only Queens Hospital Center remains in the demonstration.

97-253 **New York Graduate Medical Education Demonstration: Maimonides Medical, Coney Island Hospital & Interfaith Medical Center Joint Project**

Project Officer: Sidd Mazumdar
Period: February 1997–June 2003
Awardee: Maimonides Medical Center
Funding: $0

Status: This was a joint project with Coney Island Hospital & Interfaith Medical Center; however, only Interfaith Medical Center remains in the demonstration. Coney Island withdrew in June 1999.

97-240 **New York Graduate Medical Education Demonstration: Bronx-Lebanon Hospital Center**

Project Officer: Sidd Mazumdar
Period: February 1997–March 2002
Awardee: Bronx-Lebanon Hospital Center
Funding: $0

Status: Bronx-Lebanon Hospital Center withdrew in 2002.

97-239 **New York Graduate Medical Education Demonstration: Lincoln Medical and Mental Health Center**

Project Officer: Sidd Mazumdar
Period: February 1997–June 2003
Awardee: Lincoln Medical and Mental Health Center
Funding: $0

Status: Lincoln Medical and Mental Health Center remains in the program.

97-251 **New York Graduate Medical Education Demonstration: New York University Consortium**

Project Officer: Sidd Mazumdar
Period: February 1997–June 2003
Awardee: New York University Medical Center
Funding: $0

Status: Consortium Members: Bellevue Hospital Center, Brooklyn Hospital Center, Hospital for Joint Diseases, Lenox Hill Hospital, New York University Downtown Hospital, and New York University Medical Center.

99-054 **Evaluation of the New York Medicare Graduate Medical Education Payment Demonstration and Related Provisions**

Project Officer: William Buczko
Period: September 1999–September 2004
Awardee: Health Economics Research
Funding: $1,692,751

Status: "Recommended Design and Strategy for NY GME Demonstration and National BBA GME Provisions" is available from the National Technical Information Service, accession number PB99-175063. There are a series of reports available, including a summary report on the New York GME demonstration during the period from July 1997 through June, 2000.

00-022 **Rationalize Graduate Medical Education Funding**

Project Officer: Sidd Mazumdar
Period: February 2000–September 2005
Awardee: Medical Education Council
Funding: $839,875

Description: Since 1997, CMS has been working with the State of Utah on a project that will pay Medicare direct and indirect graduate medical education (GME) funds ordinarily received by the State's hospitals to the State of Utah Medical Education Council. GME funds will be distributed to training sites and programs according to the Council's research on workforce needs.

Status: Approval of waivers for the demonstration is needed to begin implementation.

99-030 **Programming and Data Base Support for Examining Physician Opt-out Access Issues**

Project Officer: William Buczko
Period: May 1999–July 2002
Awardee: CHD Research Associates
Funding: $59,079

Description: This project involves the creation of data files and production of descriptive statistics for Part B claims for calendar years 1997 and 1998 for Medicare beneficiaries who had been treated in 1997 by physicians who opted out of Medicare in 1998 and for calendar years 1998 and 1999 for beneficiaries treated by physicians opting out during 1999. The analysis of these data will assist CMS in evaluating whether beneficiaries who had been patients of opt-out physicians were able to find other physicians to continue their care. The Balanced Budget Act of 1997 permitted physicians and some nonphysician providers to opt out of the Medicare program. Under the legislative provisions for opting out, physicians providing their carriers with affidavits stating their desire to opt out of Medicare could withdraw from the program for a 2-year period. These physicians would then treat beneficiaries under private contracts.

Status: Descriptive utilization tables have been run for beneficiaries treated by the cohort of providers opting out during 1998. Utilization trends are broken out by age, sex, race, State of residence, physician specialty and Berenson-Eggers Type of Service code. Extracts of all Medicare Part B records for patients of 1999 opt-out physicians have been created. Descriptive tables for this cohort were constructed in July 2002.

99-042 **Validation of Physician Time Data**

Project Officer: Jim Menas
Period: August 1999–March 2002
Awardee: Health Economics Research
Funding: $460,668

Description: The project focused on the validity of the current time estimates for certain high volume codes paid under the Medicare Physician Fee Schedule. One of the tasks developed alternative sets of services for validation. The project evaluated alternative sets of criteria, including high volume, high volume per specialty, low absolute time estimates, and reference set services. It also constructed time estimates for codes using three different secondary data sets. The three data sources on which analyses were conducted were the Medical Group Management's Profiling Data Base, D. J. Sullivan Operative Time Data Base, and National Ambulatory Medical Care Survey (NAMCS).

Status: The final report on the NAMCS data and the D.J. Sullivan Operative Time Database are available from the CMS Web site as of January 2002. A second report on MGMA's Profiling Database and additional selected codes from the D.J. Sullivan Database was completed in March 2002.

99-045 **Study of Medicare Payments in Health Professional Shortage Areas**

Project Officer: William Buczko
Period: September 1999–May 2002
Awardee: RAND Corporation
Funding: $327,326

Description: This project compiles data on trends in Medicare service utilization and payments in rural areas, Health Professional Shortage Areas (HPSAs) and Medically Underserved Areas (MUAs) over the past decade. It examines the distribution of Medicare payments to HPSAs/MUAs for services provided in, or to residents of, these areas. This project will also assess the adequacy of these geographic designations and special payments and examine possible geographic designation and Medicare rural payment policy reforms.

Status: Analyses of substitution of Rural Health Center visits for physician office visits, the relationship between primary care services and avoidable hospitalizations, and alternative methods for classifying rurality and the project final report was due May 2002.

00-116 **Design, Development, and Implementation of an Improved Medicare Outpatient End Stage Renal Disease Prospective Payment System**

Project Officer: William Cymer
Period: September 2000–March 2002
Awardee: Michigan Public Health Institute
Funding: $380,038

Description: This project is the first phase of a research effort to design, develop, test, and aid in the implementation of an improved Medicare outpatient end stage renal disease prospective payment system

(ESRD PPS). This phase will identify, describe, and evaluate the adequacy of relevant CMS databases for the development of a bundled outpatient ESRD PPS. In a bundled PPS, all outpatient renal related services, tests, drugs, and supplies would be incorporated into a fixed reliable payment rate. Differences in patient specific case-mix that can be associated with legitimate differences in resource consumption would be reflected in differences in payment. This study is necessary to determine whether a case-mix measure might be appropriate under a bundled outpatient ESRD PPS.

Status: Based on findings from this first phase of research, the project assesses whether CMS databases permit the construction of clinically and statistically coherent case-mix measures predictive of provider differences in Medicare costs in a bundled outpatient ESRD PPS.

99-032 **Practice Expense Methodology**

Project Officer: Ken Marsalek
Period: May 1999–May 2004
Awardee: Lewin Group
Funding: $374,953

Description: This project provided technical assistance to evaluate various aspects of the practice expense methodology for the Medicare Physician Fee Schedule.

Status: An evaluation of the 1998 questionnaire and an initial review of the methodology of the practice expense per hour values derived from the data was completed. Recommendations regarding the practice survey design and methodology and considering how the practice-level survey could be used and how the information could be cross-walked to the socioeconomic monitoring system survey are available. In addition, medical specialty organizations reviewed and made recommendations.

99-034 **Describing and Assessing the Implication of Developing and Implementing a Prospective Payment System for Long Term Care Hospitals**

Project Officer: Carolyn Rimes
Period: June 1999–March 2002
Awardee: Urban Institute
Funding: $1,805,764

Description: This project evaluates a Prospective Payment System for Long Term Care Hospitals (PPS) and has provided analyses in support of Part B Therapy Services under Medicare. The project involves the construction of a database describing and analyzing the universe of long-term care hospitals (including any units subsequently defined/certified or licensed as long-term care hospitals) in terms of: facility characteristics, beneficiary use, beneficiary characteristics including diagnoses, referral, transfer and discharge patterns and relationship of these facilities with acute care and other care providers, including skilled nursing facilities (), home health agencies () and rehabilitation hospitals. Information from the database will be used to describe and analyze the long-term care hospitals and their interrelationship with other components of the health care system. Discharge diagnoses from long-term care and acute-care hospitals, including a detailed analysis of the treatment patterns for patients; International Classification of Diseases, 9th Revision, Clinical Modification codes; and age, gender, and disposition codes, including principal and additional diagnoses and procedural codes, will be analyzed.

Status: Analyses on the long term care hospitals has been completed. The work assessing the relationship between the outpatient therapies, specifically the impact of extending fee schedule payments and coverage limits, has been completed and is available. Additional analyses on Part B therapy services under Medicare is ongoing. The analysis on home heath is ongoing.

99-038 **Design, Development, Implementation, Monitoring & Refinement of a Prospective Payment System for Inpatient Rehabilitation**

Project Officer: Carolyn Rimes
Period: July 1999–September 2004
Awardee: RAND Corporation
Funding: $5,908,651

Description: The purpose of this project was to support the design, develop, implement, monitor, and refine a case-based prospective payment system for rehabilitation facilities providing services to Medicare beneficiaries. Phase I of this project has been completed. This research has supported the development of a PPS for inpatient rehabilitation. This included the assessment and development of a classification system based upon both UDSmr and MEDIRISK data and focused on the Medicare population. The project will assess the feasibility of including or considering additional MDS PAC variables, and assess the potential impact of the FIM-FRG classification system and subsequent payment system.

Phase II of this contract will be creating a national data base merging the Inpatient Rehabilitation Facility Patient Assessment Instrument with CMS administrative data to analyze the case mix groups and the facility adjustments for refinements to the payments systems, as well as analysis of special cases i.e., day and cost outliers, short stay, deaths, transfers and interrupted stay. Phase II will create and assist CMS in developing a monitoring system to assess the impact of the inpatient PPS and analyze the results of the staff time measurement study to assess compression. Additional tasks that will be addressed in the second phase of this contract include: impact of specific departments within the facilities or exempt units, assessment of technological innovations' impact on functional groups or the payment system, analysis of ADLs to predict disability status and payment, and continued analysis of the impact of motor and cognitive variables on predicting disability status and payment. This phase will continue to analyze the impact of impairment groups, with and without comorbidities, and analyze the impact of comorbidities and their relationship to RICs and complexities.

Status: A work plan and interim report on "Inpatient Rehabilitation Facility Prospective Payment System" for Phase I is available. The Phase II work plan is under review.

99-062 **Hospital Outpatient Prospective Payment System: Development of Volume Performance Standards and a Hospital Outpatient Market Basket**

Project Officer: Barbara Lutz
Period: September 1999–January 2002
Awardee: Health Economics Research
Funding: $410,303

Description: This project helped CMS construct a market basket specific to hospital outpatient services so that the market basket can be used to annually update the payment rates for outpatient services under prospective payment system (PPS), including partial hospitalization services in Community Mental Health Centers (CMHCs). The project helped determine a feasible long-term methodology for controlling unnecessary volume increases in hospital outpatient services and in partial hospitalization services furnished in CMHCs paid under the hospital outpatient PPS. With the exception of ambulance and outpatient rehabilitation services, which are subject to separate fee schedules, the law provides the authority to determine which services are included under the hospital outpatient PPS.

Status: This project was completed.

97-201 **Municipal Health Services Program: Baltimore**

Project Officer: Ronald Deacon
Period: June 1978–December 2004
Awardee: City of Baltimore
Funding: $0

Description: This project is part of the Municipal Health Services Program (MHSP), a collaborative effort of four major cities, the U.S. Conference of Mayors, the American Medical Association, the Robert Wood Johnson Foundation (RWJF), and CMS. CMS provides Medicare and Medicaid waivers to test the

effects of increased utilization of municipal health centers by eliminating coinsurance and deductibles, expanding the range of covered services, and paying the cities the full cost of delivering services at the clinics. The intent of the waivers is to shift fragmented utilization from costly hospital emergency rooms and outpatient departments toward lower cost MHSP clinics that would provide beneficiaries with comprehensive primary and preventive health care. Waivers and grants were awarded to Baltimore, Cincinnati, Milwaukee, and San Jose in June 1978.

Status: Congress extended the demonstration several times: The Balanced Budget Act of 1997, extended the demonstration until December 31, 2000 It also mandated a transition plan limiting any new enrollment and providing a smooth transition from demonstration to non demonstration status. The Balanced Budget Reconciliation Act of 1999 extended the transition phase until December 31, 2002, and the Medicare Benefits Improvement and Protection Act of 2000 again extended it until December 2004. A review of the cost reports indicated that a large proportion of the increase in program costs was caused by the rise in the utilization of high-cost ancillary services, e.g., prescription drugs, dental care, and vision care.

97-204 **Municipal Health Services Program: Cincinnati**

Project Officer: Ronald Deacon
Period: June 1978–December 2004
Awardee: Center for Health Policy Research, University of Colorado
Funding: $0

Description: This project supports the Municipal Health Services Program (MHSP), a collaborative effort of four major cities, the U.S. Conference of Mayors, the American Medical Association, the Robert Wood Johnson Foundation (RWJF), and CMS. CMS provides Medicare and Medicaid waivers to test the effects of increased utilization of municipal health centers by eliminating coinsurance and deductibles, expanding the range of covered services, and paying the cities the full cost of delivering services at the clinics. The intent of the waivers is to shift fragmented utilization from costly hospital emergency rooms and outpatient departments toward lower cost MHSP clinics that would provide beneficiaries with comprehensive primary and preventive health care. Waivers and grants were awarded to Baltimore, Cincinnati, Milwaukee, and San Jose in June 1978.

Status: Congress extended the demonstration several times. The Balanced Budget Act of 1997 extended the demonstration until December 31, 2000. The Balanced Budget Reconciliation Act of 1999 extended the transition phase until December 31, 2002, and the Medicare Benefits Improvement and Protection Act of 2000 again extended it until December 2004. A review of the cost reports indicated that a large proportion of the increase in program costs was caused by the rise in the utilization of high-cost ancillary services, e.g., prescription drugs, dental care, and vision care.

97-203 **Municipal Health Services Program: Milwaukee**

Project Officer: Ronald Deacon
Period: June 1978–December 2004
Awardee: City of Milwaukee
Funding: $0

Description: This project is part of the Municipal Health Services Program (MHSP), a collaborative effort of four major cities, the U.S. Conference of Mayors, the American Medical Association, the Robert Wood Johnson Foundation (RWJF), and CMS. CMS provides Medicare and Medicaid waivers to test the effects of increased utilization of municipal health centers by eliminating coinsurance and deductibles, expanding the range of covered services, and paying the cities the full cost of delivering services at the clinics. The intent of the waivers is to shift fragmented utilization from costly hospital emergency rooms and outpatient departments toward lower cost MHSP clinics that would provide beneficiaries with comprehensive primary and preventive health care. Waivers and grants were awarded to Baltimore, Cincinnati, Milwaukee, and San Jose in June 1978.

Status: Congress extended the demonstration several times: The Balanced Budget Act of 1997, extended the demonstration until December 31, 2000. The Balanced Budget Reconciliation Act of 1999 extended the

transition phase until December 31, 2002, and the Medicare Benefits Improvement and Protection Act of 2000 again extended it until December 2004. A review of the cost reports indicated that a large proportion of the increase in program costs was caused by the rise in the utilization of high-cost ancillary services, e.g., prescription drugs, dental care, and vision care.

97-202 **Municipal Health Services Program: San Jose**

Project Officer: Ronald Deacon
Period: June 1978–December 2004
Awardee: City of San Jose
Funding: $0

Description: This project is part of the Municipal Health Services Program (MHSP), a collaborative effort of four major cities, the U.S. Conference of Mayors, the American Medical Association, the Robert Wood Johnson Foundation (RWJF), and CMS. CMS provides Medicare and Medicaid waivers to test the effects of increased utilization of municipal health centers by eliminating coinsurance and deductibles, expanding the range of covered services, and paying the cities the full cost of delivering services at the clinics. The intent of the waivers is to shift fragmented utilization from costly hospital emergency rooms and outpatient departments toward lower cost MHSP clinics that would provide beneficiaries with comprehensive primary and preventive health care. Waivers and grants were awarded to Baltimore, Cincinnati, Milwaukee, and San Jose in June 1978.

Status: Congress extended the demonstration several times: The Balanced Budget Act of 1997, extended the demonstration until December 31, 2000. The Balanced Budget Reconciliation Act of 1999 extended the transition phase until December 31, 2002, and the Medicare Benefits Improvement and Protection Act of 2000 again extended it until December 2004. A review of the cost reports indicated that a large proportion of the increase in program costs was caused by the rise in the utilization of high-cost ancillary services, e.g., prescription drugs, dental care, and vision care.

01-279 **Consultation and Assistance with Evaluation of the Medigap Monitoring Demonstration Grants**

Project Officer: Marcia Marshall
Period: September 2001–December 2002
Awardee: L. Sue Anderson
Funding: $19,850

Description: This project provides support to intramural staff to evaluate the results of the Medigap Monitoring Demonstration Grants; projects being awarded in fiscal year 2001. These demonstrations collect information, monitor, and report on market conduct and violations by issuers of Medicare supplemental insurance–Medigap Insurance. The project will work with the Medigap Monitoring grant project officer to review reporting requirements and determine a process and methodology to proceed with reporting on the activities of the demonstrations, and to facilitate evaluation. It will also process and summarize the demonstration grant reports and the 3-, 6- and 9-month marks. Finally, it will evaluate the effectiveness of each of the demonstrations and compare each to the others for a final evaluation.

Status: The project is newly underway.

99-048 **Design and Simulation of Alternative Medigap Structure**

Project Officer: John Robst
Period: September 1999–February 2002
Awardee: Lewin Group
Funding: $588,984

Description: The project compiled premium data on existing standard Medigap premiums, formulated alternative standard benefit packages, and estimated premium costs of these alternative packages. From this analysis, the current and alternative Medigap options were compared. Despite many changes in the Medicare program since the early 1990s, the basic benefit structure of Medicare supplemental insurance has remained unchanged. This project examined possible

updated Medigap benefit structures, and compared these alternatives to the premiums and benefit structures of currently available supplementary coverage, as well as Medicare+Choice options.

Status: Collection of existing standard Medigap premiums from insurance carriers and State insurance commissioners is nearing completion.

00-118 **Retiree Health Benefits**

Project Officer: Brigid Goody
Period: September 2000–June 2002
Awardee: University of Wisconsin - Madison
Funding: $249,971

Description: This project examines current employer-based health insurance coverage for Medicare-eligible retirees, the prospects for continuation of this coverage, and possible implications for the restructuring of the Medicare fee-for-service (FFS) and Medicare+Choice (M+C) programs. Although approximately one-third of aged Medicare beneficiaries have coverage under an existing employer-sponsored health insurance policy, the prevalence of coverage has declined and retiree cost-sharing requirements have increased in recent years. The project will consist of two parts. The first part will analyze existing secondary data to describe the types of coverage offered to Medicare-eligible retirees, the funding for this coverage, and recent trends in coverage. The second part will be comprised of interviews aimed at understanding the prospects for future employer-sponsored coverage of this population, possible impacts of Medicare reform initiatives on this coverage, and how the Medicare program, both FFS and managed care, might be restructured to encourage continued coverage.

Status: The contractor has completed the first phase of the study and submitted a draft interim report. The interim report presents their analysis of the Kaiser Family Foundation/Health Research and Education Trust and the Medicare Current Beneficiary surveys. Key findings include:

- Availability of retiree health coverage has been fairly constant in recent years.
- There are differences in subgroups of beneficiaries with and without retiree coverage. White non-Hispanic beneficiaries with higher education and income, and who are married, are significantly more likely to have employer-sponsored insurance.
- In contrast to active employees, indemnity plans still constitute the dominant source of insurance coverage for retirees.
- Nearly all retiree health plans provide some form of prescription drug coverage.
- Only a small percentage of employers are considering changes to their retiree health benefits.

02-063 **Evaluation of Wheel Chair Purchasing in the Consumer-Directed Durable Medical Equipment (CD-DME) Demonstration and Other Fee-For-Service and Managed Care Settings**

Project Officer: William Clark
Period: September 2002–September 2004
Awardee: Abt Associates
Funding: $294,852

Description: The purpose of this task order is to conduct a preliminary case-study evaluation of a four-site initiative. The descriptive evaluation will compare and contrast the purchasing of wheelchair equipment in these sites with those utilized in fee-for-service and in managed care models, which serve people with disabilities. The study will propose further evaluation design options for CMS consideration. This initiative tests, at a local level, an important collaboration between the Department of Health and Human Services and the Department of Education intended to improve beneficiary access and satisfaction with the purchase and maintenance of wheelchair equipment.