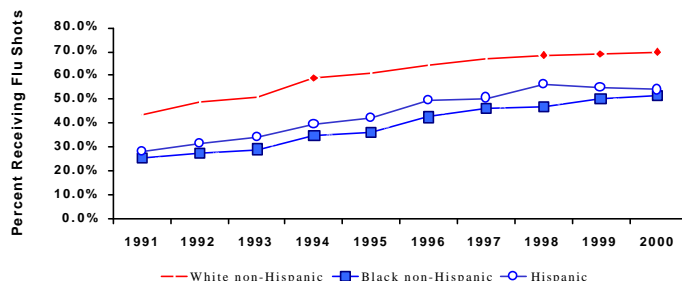


## Theme 7: Outcomes, Quality and Performance

The CMS research, demonstration, and evaluation agenda involves the development and testing of improved information resources to enable consumers to choose among health plans and providers based on their relative value and quality. One part of this agenda seeks to better understand how choices are made. The aim is to develop better tools for measuring health care outcomes and quality, as well as the performance of health plans and providers. Projects in this area include: development and assessment of performance measures, developing and testing approaches for selective contracting with providers (institutions and Medicare contracting health plans) based on quality, implementing and evaluating the Medicare lifestyle modification program demonstration, and developing new quality measures, especially for rehabilitation hospitals.

Utilization of flu shots was higher for white non-Hispanic beneficiaries than other racial groups, but rates for all groups increased over the decade.



Source: CMS, Office of Research, Development, and Information: Data from Medicare Current Beneficiary Survey (MCBS) 1991-2000 Access to Care Files.

### 00-122 Development and Production of the Medicare Quality Monitoring System

**Project Officer:** Benedicta Abel-Steinberg  
**Period:** September 2000–September 2002  
**Awardee:** Health Economics Research  
**Funding:** \$1,173,065

**Description:** The CMS Medicare Quality Monitoring System (MQMS) tracks various aspects of the health status and health care of the Medicare beneficiaries using a combination of survey and administrative data. The primary goal of the MQMS is to collect, analyze, and interpret national and/or State-specific health data (both surveys and administrative data) on service utilization, health status and outcomes on morbidity and mortality relevant to CMS's Health Care Quality Improvement Project (HCQIP). The secondary goal is to disseminate the health and quality of care data/information to support quality of care

improvement efforts and to promote HCQIP-related studies. Specifically, this effort produces two sets of data and information. One exhibits the trends, patterns and variations of service utilization and health status of Medicare beneficiaries, while the other exhibits the trends, patterns and variations of specific health outcomes relevant to HCQIP. The MQMS is designed to fully address issues of disease-specific health status and outcomes of care at the State level, and are relevant to program improvement and accountability of the HCQIP.

**Status:** HCQIP initially focused on acute myocardial infarction (AMI); however, CMS expanded its national quality improvement activities and is focusing on six clinical priority areas: AMI, breast cancer, diabetes, heart failure, pneumonia, and stroke.

### 98-251 Measurement, Indicators, and Improvement of the Quality of Life in Nursing Homes

**Project Officer:** Mary Pratt  
**Period:** June 1998–May 2002  
**Awardee:** University of Minnesota, School of Public Health  
**Funding:** \$2,766,715

**Description:** This project evaluates the impact of providing additional knowledge and educational tools on the improvement of quality of life for nursing home residents. It will focus on three topics: 1) measuring and developing indicators of quality of life, 2) developing quality improvement programs for nursing home quality of life, and 3) evaluating environmental design influences on quality of life.

The 11 domains initially tested include: autonomy, dignity, individuality, privacy, enjoyment, meaningful activity, physical comfort, relationships, security, functional competence, and spiritual well-being.

**Status:** Data analysis is underway to examine the inter-temporal and inter-rater reliability of the measures, test the transferability of the measures to nursing home personnel, and develop and test indicators of quality of life in nursing homes. In addition, the project is developing reliable ways to describe and classify features of the physical environment in nursing homes so as to study how physical environments affect quality of life.

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#### 99-121 National Resource Center on Home and Community Based Services - Quality Under Home and Community Based Waiver

**Project Officer:** Thomas Shenk  
**Period:** September 1999–September 2002  
**Awardee:** MEDSTAT Group (DC)  
**Funding:** \$3,463,070

**Description:** The purpose of this project is to develop and test the effectiveness of a National Consortium and Resource Center (NCRC) to improve access to consumer responsive home and community-based long-term care for people with disabilities of all ages. During a 24-month development period, this project focused on two related activities that could become the core of a fully operational NCRC. First, project staff will explore the effectiveness of a variety of national and State level strategies for supporting collaborative planning and problem solving among various stakeholders who influence the direction of long-term care policy reform (including Federal and State policy officials, representatives of the aging and disability community, and providers). Second, they will try out several different approaches to equipping the various stakeholders with the information, tools, and technologies they need to plan and implement cost-effective systems of consumer-responsive home and community-based services.

**Status:** In addition to the basic activities, this project also has five significant sub-activities: 1) creation of a

national inventory of quality improvement, 2) development of systems and procedures for the collection, analysis, and management of long-term care data, 3) performance measurement for the quality of care, 4) research on the availability and adequacy of personal assistance services, and 5) collection, analysis and dissemination of promising practices.

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#### 97-264 Research and Analytic Support for Implementing Performance Measurement in Fee-for-Service

**Project Officer:** Peggy Parks  
**Period:** September 1997–April 2002  
**Awardee:** Health Economics Research  
**Funding:** \$1,151,985

**Description:** The goal of this project is to provide comparable information regarding performance in managed care and fee-for-service (FFS) programs. The project evaluated performance measurement at the national and small geographic area levels and practitioner-specific performance measurement at the group practice level. The small areas correlate with managed care market service-area definitions. Five small geographic areas were selected in Arizona, Georgia, Pennsylvania, Wisconsin, and Washington. Within those small geographic areas, four group practices agreed to participate in this project as our study partners. The study partnerships assisted us in exploring the feasibility of producing these measures at the group practice level.

**Status:** The project is nearly completed. In 2002, the contractor will submit reports on the Health Outcomes Survey in Medicare Fee for Service and a comparison of it with the Health Outcomes Survey in Managed Care. A report on how responses to the survey can be biased was recently submitted.

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### 00-065 Clinical and Economic Effectiveness of a Technology-Driven Heart Failure Monitoring System

**Project Officer:** John Pilotte  
**Period:** September 2000–September 2004  
**Awardee:** University of Pennsylvania, Heart Failure and Cardiac Transplant Program  
**Funding:** \$1,688,453

**Description:** This demonstration project assesses the impact of the Alere DayLink Heart Failure Monitoring System on the clinical outcome and economic effect among Medicare beneficiaries recently hospitalized for heart failure or acute exacerbation of previously existing heart failure. The project first looks at the addition of the Alere DayLink Heart Failure Monitoring System to standard management of heart failure medical care impact on re-hospitalizations for heart failure over six months. Second, the project will analyze the impact of the monitoring system on utilization of other Medicare services, Medicare costs, functional status, processes of care, physician adherence to recommended clinical care guidelines, patient adherence with prescribed therapy, social support, and patient acceptance and satisfaction. Patients initially randomized to this technology will be re-randomized to either an additional 6 months of monitoring or to standard heart failure medical care with discontinuation of the Alere telemonitoring to assess the persistence of the intervention's effectiveness. Third, analysis will explore the impact of the extended six months of this monitoring system on re-hospitalization rates for heart failure, utilization of Medicare services, Medicare costs, patient adherence to the prescribed medical regimen, and functional status. Thus, the demonstration will assess the impact of this technology on a range of clinically and policy relevant heart failure outcomes.

**Status:** Four hundred and forty Medicare beneficiaries, recently hospitalized for management of new onset heart failure or an acute exacerbation of previously existing heart failure, were enrolled at three geographical sites of different character: rural, (Billings Montana); small Metropolitan Statistical

Area, (Louisville, Kentucky); and major Metropolitan Statistical Area, (Philadelphia, Pennsylvania).

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### 01-171 Improving Nursing Home Enforcement

**Project Officer:** Elaine Lew  
**Period:** September 2001–September 2003  
**Awardee:** C.N.A. Corporation  
**Funding:** \$400,000

**Description:** This purpose of this project is to assess the effectiveness of enforcement as the primary public policy for ensuring nursing home quality and protecting residents. This study will assess the overall effectiveness of the survey and certification regulatory system, and identify specific policy issues and options for improvement.

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

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### 01-110 The Impact of Alternative Low Vision Intervention on Quality

**Project Officer:** Joel Greer  
**Period:** August 2001–August 2003  
**Awardee:** West Virginia Research Corporation, West Virginia University  
**Funding:** \$558,867

**Description:** This project tests interventions and improve the quality of life for individuals with low vision, with a particular focus on the elderly. The West Virginia University Research Corporation is creating a regional center for vision rehabilitation services, the Appalachian Center for Visual Rehabilitation. This center will serve the low vision needs of a statewide rural community, evaluate the effectiveness of its programs, and export the beneficial ones to other rural areas across the country.

**Status:** This project was mandated by (fiscal year 2001) Appropriations legislation.

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### 01-109 State Licensure and Certification Standards and Respiratory Therapy Competency Examinations

**Project Officer:** Tamara Syrek  
**Period:** July 2001–July 2002  
**Awardee:** Barents Group  
**Funding:** \$278,491

**Description:** The purpose of this project is to prepare CMS to submit a report to Congress that examines whether the Medicare program should require competency exams or certification for those providing respiratory care in skilled nursing facilities. This project is to study and identify variations in State licensure and certification standards for health care providers (including nursing and allied health professionals) and other individuals providing respiratory therapy in skilled nursing facilities. It is also to examine State requirements relating to respiratory therapy competency examinations for these providers and individuals.

**Status:** The project is on target to receive the final report that will be submitted to Congress by March 2002.

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### 01-212 Improving Medication Safety in Outpatients Through Improved Packaging

**Project Officer:** Dennis Nugent  
**Period:** September 2001–July 2004  
**Awardee:** Ohio State University Research Foundation  
**Funding:** \$691,000

**Description:** The general intent of this project is to improve the safety of medication use. The object is to identify strategies that will directly reduce the frequency of medication errors where patient compliance with medication instructions is critical. This particular study will focus on the impact of packaging/distribution systems and patient education on compliance, treatment outcomes and frequency of adverse drug events. Three sites are used to assure an adequate sample size. Sampled patients will be those with a diagnosis of hypertension getting prescriptions

for lisinopril. After agreeing to participate, patients are randomly assigned to a study or control group. The study groups' medications are packaged in "unit of use" with special instructions; the control group gets the standard package with the usual labeling. Compliance is measured by interview, pill counts, refill regularity and blood pressure. Morbidity (angina, myocardial infarction, stroke, renal impairment) and mortality will be measured. Medical service utilization (emergency department visits, hospitalizations) will be compared. Enrollment will occur for six months and each patient will be followed for six months.

**Status:** This continues earlier work of this awardee to explore adverse drug events in outpatients.

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### 01-267 Asthma Champion Initiative

**Project Officer:** Cheryl Austein-Casnoff  
**Period:** June 2001–May 2002  
**Awardee:** Cook County, Bureau of Health Services  
**Funding:** \$350,000

**Description:** This demonstration is an attempt to reduce morbidity and mortality from asthma in high prevalence areas. The project will create two centers of clinical learning in model asthma care. It will develop culturally-appropriate educational materials and train a cadre of practicing providers in the area where asthma is highly prevalent. It will also supply intensive intervention with patients who receive emergency department services for asthma and will assess the practice sites of trained providers (Asthma Champions). This is hoped to lead to an integration of the Asthma Champion approach with related activities in the Chicago area.

**Status:** The project is newly underway.

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### 01-264 Innovations in Health Care

**Project Officer:** Dennis Nugent  
**Period:** September 2001–September 2002  
**Awardee:** Duke University, Health System  
**Funding:** \$775,833

**Description:** This is a three-phase study. First, it will develop policy case studies in strategic health planning designed to highlight the importance of integrative disease management and strategic health planning for patients with three complex and chronic diseases (congestive heart failure, diabetes, and depression). A policy case study on the management of obstetric care at them time of delivery will also be conducted. The second will summarize the evidence and develop an evidence-based approach to patient-specific strategic health planning that services to link risks and behaviors to action items unique for each patient independent of any particular disease. The plans will incorporate a broad-based integrative approach including strategies regarding nutrition, exercise, stress management, and social support. The project will then implement strategic health planning in a defined patient cohort. Finally, the project will be a cost and policy analysis of secondary prevention for patients with coronary artery disease. The objectives here will be to maximize the appropriate use of secondary prevention for this disease in Medicare patients; measure the financial impact on hospitals, providers, and patients of improving secondary prevention; and examine the effectiveness of strategies to improve adherence of physicians and patients to secondary prevention.

**Status:** The project is newly underway.

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#### 01-277 Study on Medicare Coverage of Routine Thyroid Screening

**Project Officer:** Katharine Pirotte  
**Period:** September 2001–March 2003  
**Awardee:** National Academy of Sciences, Institute of Medicine  
**Funding:** \$450,000

**Description:** This is a study on the addition of coverage of routine thyroid screening using a thyroid stimulating hormone test as a preventive benefit under Medicare. This is a mandated study [section 123 of the Benefits Improvement and Protection Act of 2000]. The mandate also requires that this involve the Academy's United States Preventive Services Task Force. The study is to consider the short-term and long-term benefits and the cost to the Medicare program of such an additional benefit.

**Status:** The project is newly underway.

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#### 02-078 Develop, Conduct and Analyze Surveys of Quality Improvement Organization (QIO) Customers

**Project Officer:** Craig Schneider  
**Period:** September 2002–March 2005  
**Awardee:** Westat Corporation  
**Funding:** \$465,046

**Description:** The purpose of this project is to conduct customer satisfaction surveys in each State regarding the quality of care complaint process. Hospitals, physicians, home health agencies, nursing homes, Medicare+Choice organizations, and beneficiaries will be surveyed. The survey will be administered at approximately the halfway point of CMS's contract with the Quality Improvement Organizations (QIO) contract. QIOs are divided into three contracting groups known as "Rounds." **Status:**

**Status:** Round One QIOs begin their three-year contracts in August 2002, Round Two in November 2002, and Round Three in February 2003.

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#### 01-257 National Initiative for a Long-term Care Workforce of Paraprofessionals

**Project Officer:** Karen Tritz  
**Period:** July 2001–December 2002  
**Awardee:** Office of the Assistant Secretary for Planning and Evaluation  
**Funding:** \$300,000

**Description:** This provides support for a project to develop a national initiative for a qualified, committed and stable long-term care workforce of paraprofessionals (home health aides, nurse assistants, personal care assistants). This initiative will contain four elements: State and local innovation grants, an applied research program, an awareness and education campaign, and an information clearinghouse on workforce innovation.

**Status:** This is a newly established project in its startup phase.

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### 01-259 Evidence Report on Routine Thyroid Screening

**Project Officer:** Katharine Pirotte  
**Period:** September 2001–June 2002  
**Funding:** \$50,000  
**Awardee:** Agency for Healthcare Research and Quality

**Description:** This project is an evidence report on routine thyroid screening using the thyroid stimulating hormone test (TSH). This report is to be developed by the Evidence-based Practice Center. Medicare cannot pay for preventive services unless such has been added by law. We are interested in expanding the current preventive services offered by Medicare. The Benefits Improvement and Protection Act requires that we obtain a study from the National Academy of Sciences and the U.S. Preventive Services Task Force on the addition of coverage for routine thyroid screening using the TSH test. This study is to consider the short and long term benefits as well as the costs of such an additional preventive benefit. This project will involve 1) research and systematic review of clinical evidence of this screening, including its efficiency and effectiveness as it applies to the Medicare population, 2) the identification of sub-populations at greatest risk, 3) an assessment of potential benefits of routine screening, and 4) a syntheses of the evidence to provide the foundation for the development of evidence-based recommendations.

**Status:** This project is in the early stages.

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### 00-175 Evaluation of Independent Informal Dispute Resolution Process (IDR)

**Project Officer:** Elaine Lew  
**Period:** September 2000–September 2003  
**Awardee:** Kathpal Technologies  
**Funding:** \$973,052

**Description:** The project evaluates the effectiveness of the current and independent informal dispute resolution (IDR) process in order to ascertain whether

revisions need to be made to Federal procedures as it relates to institutional long-term care. The current process gives a nursing home the opportunity to informally dispute survey findings to the State Survey Agency following the receipt of the Statement of Deficiencies. This is a nursing home's first opportunity for such a challenge and, while this initial step is informal, the decisions are binding. However, since the individuals who approve of the survey findings are sometimes the same ones who review IDR cases, the process is often viewed as not objective. This project responds to a recommendation in a Congressional Appropriations Committee Report (fiscal year 2000) for CMS to initiate a pilot study using an independent entity to conduct the nursing home IDR process.

**Status:** Two States (Iowa and Texas) are participating in CMS's independent IDR pilot study. For the duration of the study, these States will replace their current IDR process with an IDR process conducted by an entity outside of the State Survey Agency. The contractor is now collecting information from the two pilot States to establish baseline data from which to compare. They are also meeting with staff from the State Survey Agencies, as well as the State provider organizations and advocates, to capture their perceptions of the current IDR process.

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### 01-221 Northern New England Vascular Surgery Quality Improvement Initiative

**Project Officer:** Jackie Kennedy-Sullivan  
**Period:** September 2001–September 2003  
**Awardee:** Dartmouth University  
**Funding:** \$650,000

**Description:** The goal of this project is to improve the care of patients undergoing vascular surgery in Maine, New Hampshire and Vermont. A data registry will be used to collect detailed clinical information on patient care. A risk-adjustment model will be developed to analyze the outcomes of care. Outcomes reporting and benchmarking visits will be used to improve outcomes and reduce variations in care delivery.

**Status:** This project is in the startup phase.

### 94-074 Design and Implementation of Medicare Home Health Quality Assurance Demonstration

**Project Officer:** Armen Thoumaian  
**Period:** September 1994–December 2003  
**Awardee:** Center for Health Policy Research, University of Colorado  
**Funding:** \$5,185,699

**Description:** The Medicare Home Health Quality Assurance Demonstration has developed and tested an approach to develop outcome-oriented quality assurance techniques and promote continuous quality improvement in home health agencies (HHA). The goal of the demonstration was to determine the feasibility of a methodology for a national approach for outcome-based quality improvement (OBQI). Outcome measures were computed using the Outcomes and Assessment Information Set (OASIS). Under the demonstration, staff of 54 regionally dispersed HHAs completed the OASIS data collection instrument for each patient at the start of care and at 60-day intervals (up to and including discharge). CHSR then conducted three rounds of data analysis and outcome report generation, each based on 12 months of data. Risk adjusted reports are produced for 41 specific patient quality outcomes for all adult patients. These reports are provided to the participating HHAs and are used to determine which outcomes need improvement, thereby providing a focus for agency staff to target problematic care. The demonstration resulted in significant improvement in 80 percent of agency-specific outcome targets, with a yearly improvement in re-hospitalization rates across all agencies.

**Status:** Fifty-four agencies in 26 States were phased into the demonstration beginning in January 1996. In January 1997, the demonstration agencies received their first outcome reports and developed plans of action to improve care for two patient outcomes during 1997. Agencies received their second annual reports in May 1998, which contained baseline comparisons from 1997, and received their third and final reports in May 1999. A final report has been completed and is available. Funding was increased to a total of \$5,185,000 and the project was extended 3 years to December 2003.

### 98-257 Development and Validation of Measures and Indicators of the Quality Appropriateness of Services Rendered in Post-Acute and Long Term Care Settings

**Project Officer:** Yael Harris  
**Period:** September 1998–September 2003  
**Awardee:** Abt Associates  
**Funding:** \$5,247,965

**Description:** This project is developing and validating a comprehensive set of performance measures and indicators of quality for institutional post-acute and long-term care settings. The post-acute settings involved include skilled nursing facility short-stay units, inpatient rehabilitation facilities (which include hospital-based rehabilitation units), and long-term care hospitals. Performance measures will be standardized across provider types, in order to allow necessary comparisons to be made about outcomes of care. Performance measures may also be used within CMS's regulatory quality monitoring programs to inform quality improvement activities, to provide information to consumers, and to provide information to payers of health care for use in evaluating the quality and care delivery. The use of quality measures and indicators, such as those to be developed under this project, will allow CMS to determine objectively the value of the care it purchases by providing a valid measurement of the care furnished by Medicare-participating providers.

**Status:** Based on the comments and feedback received, a final set of nine new long term care QIs and eight post-acute QIs were developed. The team is currently involved in the validation of these measures as well as preparing 11 of these measures (9 long term care indicators and 4 post acute indicators) for Public reporting in 6 pilot States beginning in April 2002. A set of measures is expected to be posted on Medicare.gov for all nursing homes in the U.S. beginning October 2002.

## HOME HEALTH OUTCOME BASED QUALITY IMPROVEMENT SYSTEM PILOT DEMONSTRATION - HH OBQI SYSTEM

The goal of this pilot project is to explore the feasibility of establishing a national home health outcome based quality improvement (OBQI) system. Quality Improvement Organizations (QIOs, formerly known as Peer Review Organizations or PROs) work with home health agencies (HHAs) to implement quality improvement programs and provide consultation to CMS, its contractors, and State agencies. The QIOs provide a supportive role to HHAs in their endeavors to comply with Medicare Conditions of Participation, assist the State agencies in related monitoring and enforcement efforts, assist CMS and Regional Home Health Intermediaries (RHHIs) in home health program integrity assessment, and prepare summary information about the Nation's home health care. Major objectives include: develop training materials for the pilot QIOs and HHAs about the Outcome and Assessment Information Set (OASIS), OASIS outcome reports, OASIS based quality improvement programs; assist the other pilot PROs to provide OBQI training and/or consultation to the HHAs in their State, to State agencies, and CMS; provide regular assessments of local, regional and national home health services, create a clearing house to distribute information about best practices in home health; develop materials for Medicare beneficiaries to facilitate proper interpretation of home health outcome reports; and perform special studies to assist in CMS quality improvement, program integrity and medical review efforts in HHAs. Although State agencies will be responsible for generating State aggregate information using agency-specific reports, a mechanism has not been developed to provide support to the HHAs to develop and manage quality improvement programs.

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### 00-012 Home Health Outcome Based Quality Improvement System Pilot Demonstration - HH OBQI System PRO

**Project Officer:** Armen Thoumaian  
**Period:** December 1999–March 2002  
**Awardee:** Delmarva Foundation for Medical Care  
**Funding:** \$1,365,517

**Status:** In progress.

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### 00-013 Home Health Outcome Based Quality Improvement System Pilot Demonstration - HH OBQI Pilot PRO - Maryland

**Project Officer:** Armen Thoumaian  
**Period:** December 1999–March 2002  
**Awardee:** Delmarva Foundation for Medical Care  
**Funding:** \$178,000

**Status:** The Maryland Peer Review Organizations (PRO) will work with home health agencies (HHAs) to implement quality improvement programs, provide consultation to CMS, its contractors, and State agencies.

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### 00-014 Home Health Outcome Based Quality Improvement System Pilot Demonstration - HH OBQI Pilot PRO - New York

**Project Officer:** Armen Thoumaian  
**Period:** December 1999–March 2002  
**Awardee:** Island Peer Review Organization  
**Funding:** \$690,000

**Status:** The New York QIOs assist the State agencies in related monitoring and enforcement, work with home health agencies (HHAs) to implement quality improvement programs, and provide consultation to CMS, its contractors, and State agencies.



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**00-015 Home Health Outcome Based Quality Improvement System Pilot Demonstration - HH OBQI Pilot PRO - Michigan**

**Project Officer:** Armen Thoumaian  
**Period:** December 1999–March 2002  
**Awardee:** Michigan Peer Review Organization  
**Funding:** \$652,000

**Status:** The Michigan QIOs work with home health agencies (HHAs) to implement quality improvement programs, provide consultation to CMS, its contractors, and State agencies.

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**00-016 Home Health Outcome Based Quality Improvement System Pilot Demonstration - HH OBQI Pilot PRO - Rhode Island**

**Project Officer:** Armen Thoumaian  
**Period:** December 1999–March 2002  
**Awardee:** Rhode Island Quality Partners  
**Funding:** \$450,000

**Status:** The Rhode Island QIOs work with home health agencies (HHAs) to implement quality improvement programs, provide consultation to CMS, its contractors, and State agencies.

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**00-017 Home Health Outcome Based Quality Improvement System Pilot Demonstration - HH OBQI Pilot PRO - Virginia**

**Project Officer:** Armen Thoumaian  
**Period:** December 1999–March 2002  
**Awardee:** Virginia Health Quality Center  
**Funding:** \$474,000

**Status:** The Virginia QIOs work with home health agencies (HHAs) to implement quality improvement programs, provide consultation to CMS, its contractors, and State agencies.

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**01-211 Integrated Chronic Disease Quality Performance Measurement at the Physician Level**

**Project Officer:** Barbara Fleming  
**Period:** September 2001–March 2004  
**Awardee:** C.N.A. Corporation  
**Funding:** \$499,999

**Description:** This project is to assist CMS in exploration of the issues important to physician level quality of care scoring in chronic disease and prevention. The project will help to define quality of care for chronic disease using existing performance measures and will use existing data to begin to model these concepts. Performance measurement supports CMS program management and policy development purposes, such as quality improvement in the QIO program, demonstration of accountability, and value-based purchasing. Several of our projects have attempted to integrate broader chronic disease-based thinking into their measurement structure (i.e., the Diabetes Quality Improvement Project or DQIP, the Study of Clinically Relevant Indicators of Pharmacologic Therapy or SCRIPT, and the Ambulatory Care Quality Improvement Program or ACQIP). The ACQIP data will be the primary vehicle for the initial work. The second phase applies knowledge gained in diabetes care quality measurement to develop a framework and model for composite quality of care scoring for chronic disease.

**Status:** This project is in the startup phase.

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**01-118 Improved Protocols for Home Health Agency Assessment in the Survey Process**

**Project Officer:** Tracey Mummert  
**Period:** September 2001–March 2004  
**Awardee:** Center for Health Policy Research, University of Colorado  
**Funding:** \$797,000

**Description:** The purpose of this project is to assess the existing home health agency (HHA) survey process and make recommendations for improvements. Improvements include patient-focused, outcome-

oriented, data-driven approaches that are effective and efficient in assessing, monitoring and evaluating the quality of care delivered by an HHA. The project will also evaluate the effectiveness of current survey forms, develop new survey forms, as applicable, and make recommendations for prioritizing onsite survey time. The assessment will focus on the Outcome and Assessment Information Set (OASIS), designed for the purpose of enabling the rigorous and systematic measurement of patient home health care outcomes, with appropriate adjustment for patient risk factors affecting those outcomes; and the Online Survey Certification and Reporting System (OSCAR).

**Status:** The period of performance was extended to June 2004. To date, several States have volunteered to participate in the testing of the new survey protocols.

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#### 01-268 **Ultrasound Screening for Abdominal Aortic Aneurysms**

**Project Officer:** William Saunders  
**Period:** September 2001–September 2002  
**Awardee:** Dartmouth University  
**Funding:** \$500,000

**Description:** The objectives of this project are to determine the feasibility and benefit of ultrasound screening to detect abdominal aortic aneurysm in Medicare beneficiaries. It will determine the prevalence of such aneurysms in the screened population, evaluate the cost of developing and maintaining an ultrasound screening program to detect these aneurysms and determine the cost-effectiveness of screening Medicare patients.

**Status:** This award was directed by the FY2001 Appropriation bill, PL 106-554.

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#### 01-170 **Development of Quality Indicators for Inpatient Rehabilitation Facilities**

**Project Officer:** Lisa Hines  
**Period:** September 2001–September 2003  
**Awardee:** Research Triangle Institute, (NC)  
**Funding:** \$1,420,000

**Description:** The purpose of this project is to support developing and defining measures to monitor the quality of care and services provided to Medicare beneficiaries receiving care in inpatient rehabilitation facilities. It will identify the elements integral to assessing quality of care in rehabilitative services and developing a set of measures for use by States.

**Status:** The period of performance was extended to June 2004. To date, several States have volunteered to participate in the testing of the new survey protocols.

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#### 01-289 **Northern New England Vascular Surgery Quality Improvement Initiative - II**

**Project Officer:** Sheila Roman  
**Period:** September 2001–September 2002  
**Awardee:** Dartmouth University  
**Funding:** \$500,000

**Description:** The goal of this study is to improve the care of patients undergoing vascular surgery. Data will be collected regarding indications, comorbidities, operative details and outcomes for vascular surgery, including abdominal aortic aneurysm repair. A risk adjuster model will be developed. The study will use a cooperative clinical data registry, benchmarking visits by clinicians, comparative process analysis, and continuous quality improvement to improve outcomes and reduce variation in care delivery.

**Status:** This award was directed by the FY2001 Appropriation bill, PL 106-554.

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### 01-221 Northern New England Vascular Surgery Quality Improvement Initiative - I

**Project Officer:** Beth Kosiak  
**Period:** September 2001–September 2003  
**Awardee:** Trustees of Dartmouth College, Office of Grants and Contracts  
**Funding:** \$262,000

**Description:** The goal of this project is to improve the care of patients undergoing vascular surgery in Maine, New Hampshire and Vermont. A data registry will be used to collect detailed clinical information on patient care. A risk-adjustment model will be developed to analyze the outcomes of care. Outcomes reporting and benchmarking visits will be used to improve outcomes and reduce variations in care delivery.

**Status:** This project is in the startup phase.

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### 02-081 Construction of Analytic Files for Study of the Cardiac Rehabilitation Benefit Among Medicare Beneficiaries

**Project Officer:** Rosemarie Hakim  
**Period:** September 2002–March 2003  
**Awardee:** CHD Research Associates  
**Funding:** \$39,997

**Description:** The purpose of this task order is to provide programming support for the development of analytic files that will be used to determine whether use of cardiac rehabilitation has a health benefit on Medicare beneficiaries as evidenced by a reduction in adverse outcomes including hospitalizations, use of home health or long-term health services, or death. The study requires longitudinal files based on a cohort of Medicare beneficiaries who were candidates for cardiac rehabilitation from January 1995 through December 1996. All medical treatment received by this cohort will then be followed up for a period of up to 5 years subsequent to entry into the cohort.

**Status:** Currently in AGG 4/1/02.

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### 02-056 Examining Long-Term Care Episodes and Care History for Medicare Beneficiaries

**Project Officer:** William Buczko  
**Period:** September 2002–September 2005  
**Awardee:** Urban Institute  
**Funding:** \$649,958

**Description:** This project studies longitudinal patterns of care of elderly beneficiaries with likely long-term care needs and the progress of groups of beneficiaries with similar health/functional status who remain in the community or who move from the community to institutional settings, as well as within institutional settings. It will develop a research model and conduct studies based on this model to assess the progress of beneficiaries with similar medical conditions, functional status, and long-term care needs through the health care delivery system. It will address key factors influencing the delivery of care such as insurance coverage, types of services used, processes leading to institutionalization, and costs of care.

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### 98-276 Healthy Aging/Smoking Cessation

**Project Officer:** James Coan  
**Period:** October 1998–September 2004  
**Awardee:** RAND Corporation  
**Funding:** \$200,000

**Description:** This demonstration will test smoking cessation as a Medicare benefit, based on RAND's Healthy Aging Project evidence report on smoking cessation and the Public Health Service clinical guideline on treating tobacco use and dependence. The demonstration will compare the impact of offering three different types of benefits for smoking cessation services on "quit" rates. The benefit options are: 1) reimbursement for provider counseling only; 2) reimbursement for provider counseling, in addition to FDA-approved prescription or nicotine replacement therapy; and 3) telephone counseling quit-line and reimbursement for nicotine replacement therapy; and 4) usual care (smoking cessation information). States participating in the demonstration are Alabama, Florida, Missouri, Ohio, Oklahoma, Nebraska, and Wyoming.

**Status:** Legislation is required to add a smoking cessation benefit in Medicare. The Office of Management and Budget (OMB) agreed to the waiver which permits these demonstrations to operate in January 2001.

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#### 01-217 Healthy Aging/Smoking Cessation

**Project Officer:** James Coan  
**Period:** August 2001–February 2002  
**Awardee:** Olgivy, Seniors Research Group  
**Funding:** \$253,275

**Description:** This demonstration is a part of the Healthy Aging Project and is intended to test potential interventions for smoking cessation that may be offered as a Medicare covered benefit to beneficiaries who smoke. The following variations in a smoking cessation benefit will be tested: 1) provider counseling reimbursement only, 2) provider counseling reimbursement with bupropion or nicotine replacement pharmacotherapy coverage, 3) Quitline and nicotine replacement pharmacotherapy coverage, and 4) usual care. The specific goals of the Medicare Stop Smoking Program are to evaluate the effectiveness, feasibility, and cost of the smoking cessation benefit strategies in seven States and to make inferences that are generalizable to the Medicare program.

**Status:** The States participating in the demonstration are Alabama, Florida, Missouri, Nebraska, Ohio, Oklahoma, and Wyoming.

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#### 96-050 Influenza and Pneumococcal Analytic Reports

**Project Officer:** Lawrence LaVoie  
**Period:** September 1996–January 2002  
**Awardee:** CHD Research Associates  
**Funding:** \$698,924

**Description:** This project develops a research data base using CMS Medicare claims data to study the epidemiology of influenza (flu) and pneumococcal vaccination (PPV). One goal is to promote vaccinations by health-care providers, and to support coverage for Medicare beneficiaries. For example, Medicare claims records for PPV are extracted and

merged to create a beneficiary-level PPV research file used to generate annual and cumulative immunization rates. Using both the PPV file and flu immunization data file, a series of national and State-specific statistics are produced. Medicare utilization and enrollment data are linked with the PPV and flu files data to analyze immunization rates of high-risk beneficiaries.

**Status:** A PPV research file update with 2000 Medicare claims has been completed. National and State-specific statistics, based on analysis of 1999 Medicare claims, have been published in tables and reports and posted on CMS's web site.

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#### 96-219 Medicare State Health Profile

**Project Officer:** Paul Elstein, Benedicta Abel-Steinberg  
**Period:** September 1996–April 2002  
**Awardee:** RAND Corporation  
**Funding:** \$2,146,988

**Description:** This project analyzes claims data at the State level and enhances data with additional diagnosis-specific analyses and analyses of inpatient encounter data from Medicare+Choice organizations, focusing on four of clinical priority areas (acute myocardial infarction (AMI), heart failure, diabetes, breast cancer, pneumonia, and stroke/transient ischemic attack). CMS contracts with Quality Improvement Organizations (QIO, formerly peer review organizations) in each of the 50 States, and in the District of Columbia, Puerto Rico, and the Virgin Islands. QIOs are focusing on quality outcomes through the Health Care Quality Improvement Program (HCQIP). The outcome measures for the clinical areas include mortality and re-admissions, and data sources include claims, medical records, and surveys.

**Status:** Analyses are available from the CMS web site.

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### 00-120 Implementation of Quality Improvement Organization 6th Scope of Work Pneumococcal Pneumonia and Influenza Immunization Remeasurement Survey

**Project Officer:** Susan Arday  
**Period:** September 2000–November 2002  
**Awardee:** Abt Associates  
**Funding:** \$1,542,230

**Description:** This project specifically implements the Pneumococcal Pneumonia and Influenza Immunization Remeasurement Survey. The goal is to assess the utilization of influenza and pneumococcal vaccines among Medicare beneficiaries, and to evaluate the vaccine promotion work performed by Quality Improvement Organizations (QIO, formerly Peer Review Organizations) under their Medicare sixth Scope of Work. The survey is administered to a sample of Medicare beneficiaries randomly selected from each of 50 States plus the District of Columbia and Puerto Rico, and will produce the attendant State-specific rates.

**Status:** There are two separate, sequential rounds of data collection. All data collection and delivery for the first round was completed by June 2001. The second round of the survey data collection was completed June 2002.

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### 01-220 Heart Failure Home Care

**Project Officer:** John Pilotte  
**Period:** September 2001–September 2004  
**Awardee:** University of Pittsburgh, Office of Research  
**Funding:** \$1,847,941

**Description:** This project seeks to use integrated nursing services and technology to implement daily monitoring of congestive heart failure patients in under-served populations in accordance with established clinical guidelines. The demonstration tests the clinical and economic effectiveness of the Alere

Day Link Home Monitoring Device in Medicare beneficiaries from under-served population groups receiving care in community-based practices who are diagnosed with congestive heart failure and who have had a hospitalization within the last 6 months. The primary hypothesis is that the addition of this device to standard management of heart failure will reduce 6-month heart failure hospitalization rates, cardiovascular death, and decrease length of hospital stay for heart failure.

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

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### 00-053 Medicare Lifestyle Modification Program Demonstration Evaluation

**Project Officer:** Armen Thoumaian  
**Period:** September 2000–August 2005  
**Awardee:** Brandeis University, Heller Graduate School, Institute for Health Policy  
**Funding:** \$1,995,144

**Description:** This project evaluates the health outcomes and cost effectiveness of the Medicare Lifestyle Modification Program Demonstration for Medicare beneficiaries with coronary artery disease (CAD). The demonstration tests the feasibility and cost effectiveness of providing payment for cardiovascular lifestyle modification program services to Medicare beneficiaries. The goal of the evaluation is to provide an assessment of the health benefit and cost-effectiveness of treatment for Medicare beneficiaries with CAD who enroll in the 12-month cardiovascular lifestyle modification programs at the demonstration sites. The evaluation of the demonstration assesses the overall performance of the demonstration sites, including the quality of health care delivery over the course of the demonstration period; and the use of systems for administration, claims processing and payment, and the routine monitoring of quality of care.

**Status:** In September, 2001, the evaluation was expanded to include a longer followup period of treatment and control patients and to include a critical review of literature. Preparations are being made to begin efforts to find Medicare beneficiaries that can be

matched to those receiving treatment and followed as controls. We are awaiting final OMB approval of the beneficiary and provider survey instruments. The evaluation team has completed initial site visits and submitted a site visit report with recommendations.

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### 99-136 Medicare Lifestyle Modification Program Demonstration Continuous Quality Monitoring

**Project Officer:** Mary Pratt  
**Period:** July 1999–September 2003  
**Awardee:** Delmarva Foundation for Medical Care  
**Funding:** \$639,215

**Description:** This project provides the quality monitoring for a 4-year payment demonstration designed to evaluate the feasibility and cost effectiveness of cardiovascular lifestyle modification. The demonstration is being implemented at participating sites licensed by the Dr. Dean Ornish Program for Reversing Heart Disease®, and is being expanded to include facilities licensed to provide the Cardiac Wellness Expanded Program of Dr. Herbert Benson and the Mind Body Medical Institute. Sites under each model will be able to enroll up to 1800 Medicare Part B eligible beneficiaries who meet the clinical enrollment criteria and voluntarily elect to participate in the demonstration. Claims processing and payment are managed through the Demonstrations Management Branch in the Office of Financial Management. This project provides continuous quality monitoring of the demonstration sites to help assure the health and safety of the participating Medicare patients.

**Status:** The period for the demonstrations commenced on October 1, 1999. On November 28, 2000, the enrollment criteria were amended to include patients with less severe cardiovascular disease. In accordance with Public Law 106-554, the Consolidated Appropriations Act of 2001, steps have been completed to incorporate the lifestyle program of the Mind/Body Medical Institute (M/BMI) into the demonstration. The same law provided a mandate for a 4-year treatment period beginning November 13, 2000. DelMarVa continues to provide the quality monitoring for the demonstrations, as modified.

### MEDICARE LIFESTYLE MODIFICATION PROGRAM DEMONSTRATION - PREVENTIVE MEDICINE RESEARCH INSTITUTE

The Medicare Lifestyle Modification Program Demonstration is a 4-year payment project implemented to evaluate the feasibility and cost effectiveness of cardiovascular lifestyle modification. The demonstration is being implemented at participating sites licensed by the Dr. Dean Ornish Program for Reversing Heart Disease®. Sites will be able to enroll up to 1800 Medicare Part B eligible beneficiaries who meet the clinical enrollment criteria and voluntarily elect to participate in the demonstration. The demonstration sites will receive 80 percent of a total negotiated fixed payment amount for a 12-month program. Sites may collect (or waive) the remaining 20 percent from the beneficiary as an enrollment fee. Claims processing and payment is managed through the Demonstrations Management Branch in the Office of Financial Management.

**Status:** On November 28, 2000, the enrollment criteria were amended to include patients with less severe cardiovascular disease. In accordance with Public Law 106-554, the Consolidated Appropriations Act of 2001, steps have been completed to incorporate a second lifestyle program operated by the Mind/Body Medical Institute (M/BMI) into the overall demonstration.

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### 01-236 Medicare Lifestyle Modification Program Demonstration - Preventive Medicine Research Institute – Kearney, Nebraska

**Project Officer:** Armen Thoumaian  
**Period:** June 2001–September 2003  
**Awardee:** Good Samaritan Hospital, Health Lifestyle Program  
**Funding:** \$0

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**00-178 Medicare Lifestyle Modification Program Demonstration - Preventive Medicine Research Institute – Rockford, Illinois**

**Project Officer:** Armen Thoumaian  
**Period:** May 2000–September 2003  
**Awardee:** Swedish American Center for Complementary Medicine  
**Funding:** \$0

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**01-235 Medicare Lifestyle Modification Program Demonstration - Preventive Medicine Research Institute – Bloomington, Indiana**

**Project Officer:** Armen Thoumaian  
**Period:** January 2001–September 2003  
**Awardee:** BroMenn Healthcare, Department of Cardiology  
**Funding:** \$0

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**00-177 Medicare Lifestyle Modification Program Demonstration - Preventive Medicine Research Institute - Pittsburgh**

**Project Officer:** Armen Thoumaian  
**Period:** July 2000–September 2003  
**Awardee:** Highmark Blue Cross/Blue Shield  
**Funding:** \$0

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**00-176 Medicare Lifestyle Modification Program Demonstration - Preventive Medicine Research Institute - Omaha**

**Project Officer:** Armen Thoumaian  
**Period:** July 2000–September 2003  
**Awardee:** Alegent Health, Immanuel Medical Center  
**Funding:** \$0

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**MEDICARE LIFESTYLE MODIFICATION PROGRAM DEMONSTRATION - MIND/BODY MEDICAL INSTITUTE**

The Medicare Lifestyle Modification Program Demonstration is a 4-year payment project implemented to evaluate the feasibility and cost effectiveness of cardiovascular lifestyle modification.

The demonstration is being implemented at participating facilities licensed to provide the Cardiac Wellness Expanded Program of Dr. Herbert Benson and the Mind Body Medical Institute. Sites under this model will be able to enroll up to 1800 Medicare Part B eligible beneficiaries who meet the clinical enrollment criteria and voluntarily elect to participate in the demonstration. The demonstration sites will receive 80 percent of a total negotiated fixed payment amount for a 12-month program. Sites may collect (or waive) the remaining 20 percent from the beneficiary as an enrollment fee. Claims processing and payment is managed through the Demonstrations Management Branch in the Office of Financial Management.

**Status:** On November 28, 2000, the enrollment criteria were amended to include patients with less severe cardiovascular disease. In accordance with Public Law 106-554, the Consolidated Appropriations Act of 2001, steps have been completed to incorporate this lifestyle program of the Mind/Body Medical Institute (M/BMI) into the overall demonstration.

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**01-237 Medicare Lifestyle Modification Program Demonstration - Mind/Body Medical Institute – Boston**

**Project Officer:** Armen Thoumaian  
**Period:** June 2001–November 2004  
**Awardee:** Beth Israel Deaconess Medical Center  
**Funding:** \$0

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**01-238 Medicare Lifestyle Modification Program Demonstration - Mind/Body Medical Institute – Warwick, Rhode Island**

**Project Officer:** Armen Thoumaian  
**Period:** September 2001–November 2004  
**Awardee:** Care New England Wellness Center  
**Funding:** \$0

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**01-239 Medicare Lifestyle Modification Program Demonstration - Mind/Body Medical Institute - South Bend, Indiana**

**Project Officer:** Armen Thoumaian  
**Period:** August 2001–November 2004  
**Awardee:** St. Joseph Regional Medical Center  
**Funding:** \$0

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**02-020 Medicare Lifestyle Modification Program Demonstration - Mind/Body Medical Institute - Nashville**

**Project Officer:** Armen Thoumaian  
**Period:** December 2001–November 2004  
**Awardee:** Baptist Hospital System, Cardiac Wellness Program  
**Funding:** \$0

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**02-021 Medicare Lifestyle Modification Program Demonstration - Mind/Body Medical Institute - Houston**

**Project Officer:** Armen Thoumaian  
**Period:** November 2001–November 2004  
**Awardee:** Memorial Hermann Southwest Hospital  
**Funding:** \$0

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**02-057 Outcome and Assessment Information Set (OASIS) Technical Analysis & Support Contract**

**Project Officer:** Armen Thoumaian  
**Period:** September 2002–September 2006  
**Awardee:** Center for Health Services Research (formerly: Center for Health Policy Research) University of Colorado–Health Sciences Center  
**Funding:** \$1,099,982

**Description:** The purpose of this contract is to provide technical analysis and consultation in support of the CMS objective to provide information that can be used to improve home health quality of care and to provide public reporting about home health quality of care outcomes. The project will design and implement a data analysis system to provide information on a regular basis for the public reporting effort. Home health outcome information is derived from the analysis of data obtained from the collection and reporting by home health agencies (HHAs) of patient assessment information using the Outcome & Assessment Information Set (OASIS).

**Status:** In startup phase.