

**DEPARTMENT
OF HEALTH
AND HUMAN
SERVICES**

Agency for Health Care Research and Quality

FISCAL YEAR 2003 PERFORMANCE PLAN

FISCAL YEAR 2002 REVISED FINAL PLAN

FISCAL YEAR 2001 PERFORMANCE REPORT

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Part I - AGENCY CONTEXT FOR PERFORMANCE MEASUREMENT

*“Knowing is not enough; we must apply
Willing is not enough; we must do”*

–Goethe

Introduction:

The Agency for Healthcare Research and Quality (AHRQ) Performance Plan is a companion piece to the AHRQ Strategic Plan and to the FY 2003 Budget Request. In this document the initial FY 2003 and revised FY 2002 Performance Plans have been merged with the FY 2001 Performance Report to comply with the format developed by the Department of Health and Human Services (HHS).

The 2003 Performance Plan being submitted has undergone an extensive review, reorganization and revision that we believe will increase its clarity and usefulness as a strategic management tool. This document reflects the agencies transition from goals which were closely aligned with the “Cycle of Research” to goals which are more closely reflect the agency’s vision, mission and strategic goals. As a result, the FY2001 Performance Report and the FY 2002 Performance Plan will continue to be organized around the seven goals identified in the FY 2002 Congressional Justification. Beginning with the 2003 Performance Plan, however, performance goals will be more closely aligned with the agencies strategic goals and performance measures will include both output and outcome measures. Specifically, these changes include:

- ◆ Individual sections devoted to a single strategic goal. Each section will contain the Strategic Goal and Strategic Objectives, followed by the Performance Goal, Performance Measure, and Strategies.
- ◆ Use of the results by AHRQ and issues related to data availability and integrity as well as the identification of key factors that influence our success have been rewritten and incorporated with the performance goals they support.
- ◆ Strategies receive a greater focus, as they give direction and guidance to AHRQ staff and outline how we will achieve our goals.

We believe that these revisions will enable us to determine how well the basic knowledge which forms the core of AHRQ’s work provides information which can be turned into actions by those who make clinical decisions, purchasers and providers who make decisions about what services to use, pay for and how to structure those services, as well as by policy makers.

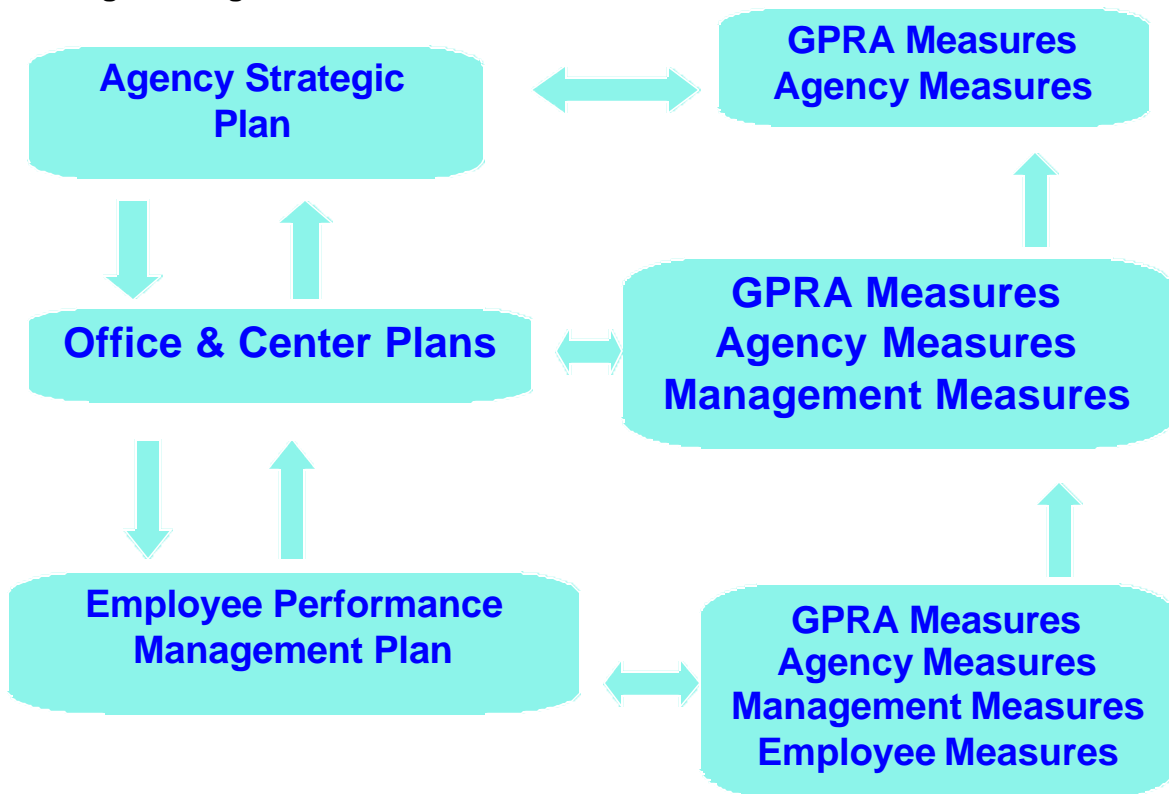
1.1 Overview of the Context of GPRA in AHRQ

General program direction and strategic planning is accomplished through the collaboration of the Office of the Director (with its four administrative offices) and six Research Centers, which have programmatic responsibility for portions of the Agency’s

research portfolio. The Agency planning processes, facilitated by the electronic Planning System completed in FY2000, are linked to budget planning and performance management through GPRA.

The agency's strategic plan guides the overall management of the agency. Each Office and Center (O/C) have individual strategic and operations plans. The annual operations plans identify critical success factors that illustrate how each O/C contributes to AHRQ achieving its strategic and annual performance plan goals, as well as internal O/C management goals. In turn these critical success factors serve as the basis for each employee's annual performance plan. This nesting of plans allows the individual employee to see how her or his job and accomplishments further the respective unit's goals and the Agency's mission. At the end of each year, the Office and Center Directors and their staffs review their accomplishments in relation to the annual operations plans and draft the next year's plans. The results of the reviews contribute significantly to the performance reports, which are influential in revising the operations plans and in turn, the agency strategic plan.

Strategic Management at AHRQ



As a result of the increased emphasis on strategic planning, evaluation activities have taken on greater focus. Evaluations are used to demonstrate the impact of Agency work on the health care system, to test and improve the usefulness and usability of Agency products, and to assess the effectiveness and efficiency of internal operations. The results of the evaluation studies are used to make planning, budget, and operations decisions in subsequent years, as well as for GPRA reporting purposes.

1.2 Agency Vision, Mission, and Strategic Goals

Vision

The vision of the Agency for Healthcare Research and Quality (AHRQ) is to foster health care research that helps the American health care system provide access to high quality, cost-effective services; be accountable and responsive to consumers and purchasers; and improve health status and quality of life.

Mission

The Agency's mission is to improve the outcomes and quality of health care services, reduce its costs, address patient safety, and broaden access to effective services, through the establishment of a broad base of scientific research and through the promotion of improvements in clinical and health system practices, including the prevention of diseases and other health conditions.

The Agency promotes health care quality improvement by conducting and supporting health services research that develops and presents scientific evidence regarding all aspects of health care. Health services research addresses issues of "organization, delivery, financing, utilization, patient and provider behavior, quality, outcomes, effectiveness and cost. It evaluates both clinical services and the system in which these services are provided. It provides information about the cost of care, as well as its effectiveness, outcomes, efficiency, and quality. It includes studies of the structure, process, and effects of health services for individuals and populations. It addresses both basic and applied research questions, including fundamental aspects of both individual and system behavior and the application of interventions in practice settings."¹

AHRQ Strategic Plan

The strategic plan will serve as the road map for AHRQ activities through 2002. The current plan was released in December 1998 after an extensive planning process and was made widely available for comment. In 2001, AHRQ published its second "Request for Ideas" (RFI) soliciting ideas from the Agency's customers and the general public for priorities in the context of planning for the new Strategic Plan. In addition, the National Advisory Committee (NAC) to AHRQ is providing feedback to the agency, and several NAC members have agreed to participate in an ad hoc advisory planning group.

AHRQ assesses the progress made toward achieving each of the goals as part of the annual planning and budget development process. These assessments are integral to AHRQ's compliance with the Government Performance and Results Act of 1993 and provide the backdrop against which the next year's activities are planned. The completion of the 2000 performance report provided valuable information to the Agency on progress toward strategic goals. Results have been used to gather new knowledge, improve research management, and strengthen dissemination activities.

AHRQ has identified three strategic goals, each of which will contribute to improving the quality of health care for all Americans.

¹ Eisenberg JM. Health Services Research in a Market-Oriented Health Care System. *Health Affairs*, Vol. 17, No. 1:98-108, 1998.

AHRQ Goal 1. Support Improvements in Health Outcomes

AHRQ seeks to support research to understand and improve decision-making at all levels of the health care system, the outcomes of health care and, in particular, what works, for whom, when, and at what cost.

AHRQ Goal 2. Strengthen Quality Measurement and Improvement

AHRQ is interested in a broad array of research topics, including studies to develop valid and reliable measures of the process and outcomes of care, causation and prevention of errors in health care, strategies for incorporating measures of quality improvement into programs, and dissemination and implementation of validated quality improvement mechanisms.

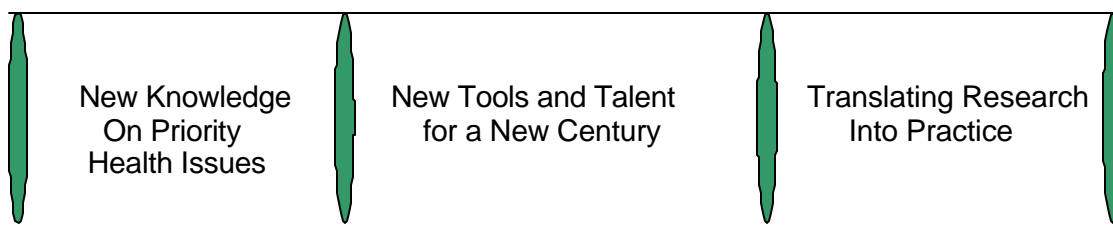
AHRQ Goal 3. Identify Strategies To Improve Access, Foster Appropriate Use, and Reduce Unnecessary Expenditures

AHRQ will focus on whether particular approaches to health care delivery and financing, or characteristics of the health care market, alter behaviors in ways that improve access and promote cost-effective use of health care resources.

1.3 Organization, Programs, Operations, and Strategies

The main focus of AHRQ research is on the delivery of health care and identifying ways to measure and improve it. Most of the Agency's research portfolio consists of extramurally funded work from leading universities and other research institutions throughout the Nation. The portfolio also contains an impressive body of intramural research. Issues related to the quality, cost and use of, as well as access to, health care are studied through extramural and intramural research. Extramural research is the primary source of studies on outcomes and effectiveness. AHRQ sponsored and conducted research measures the effectiveness of the services that deliver preventive, diagnostic, and therapeutic care, compares them with existing practice, and evaluates the ability of the health care system to deliver them effectively. The Agency has an increasing focus on patient safety and the reduction in medical errors, as well as research that will accelerate and magnify the impact of research on clinical practice and patient outcomes. Through the Translating Research Into Practice (TRIP) agenda, the Agency sponsors applied research to develop sustainable and replicable models and tools to improve the quality, outcomes, effectiveness, efficiency, and cost effectiveness of health care.

The Research Pipeline



The AHRQ portfolio reflects a “pipeline” of activities that together build the infrastructure, tools, and knowledge for improvements in the American health care system. This pipeline begins with the funding of new research that answers important questions about what works in American health care (*New Knowledge on Priority Health Issues*).

The second section in the pipeline (*New Tools and Talent for a New Century*) is focused on more applied research and translates new knowledge into instruments for measurement, databases, informatics, and other applications that can be used to assess and improve care.

The final section of the pipeline is where the first two investments come together by closing the gap between what we know and what we do (*Translating Research Into Practice*). AHRQ funds research and demonstrations to translate the knowledge and tools into measurable improvements in the care Americans receive.

AHRQ Audiences

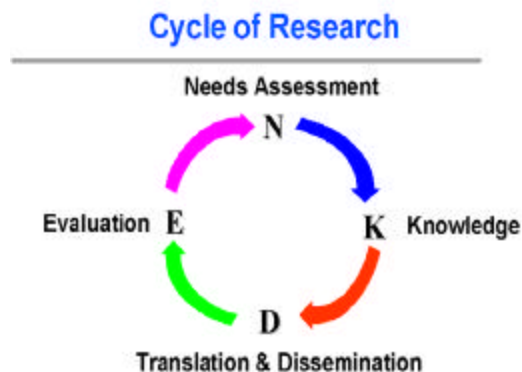
Agency activities begin and end with the end-users of Agency research. AHRQ customers require evidence-based information to inform health policy decisions. Health policy choices in this context represent three general levels of decision-making:

Clinical Decisions - Information is used every day by clinicians, consumers, patients, and health care institutions to make choices about what works, for whom, when, and at what cost.

Health Care Organizations Policy Decisions - Health plan and system administrators, policymakers, and purchasers are confronted daily by choices on how to improve the health care system’s ability to provide access to and deliver high-quality, high-value care.

Public Policy Decisions - Policymakers to expand their capability to monitor and evaluate the impact of system changes on outcomes, quality, access, cost, and use of health care use Information and to devise policies designed to improve the performance of the system. These decisions include those made by Federal, State, and local policymakers and those that affect the entire population or certain segments of the public.

AHRQ Cycle of Research



Producing meaningful contributions to the Nation and to research on health care requires continuous activity focused on iterative improvement in priority setting, on developing research initiatives, and on research products and processes. The following research cycle describes the processes AHRQ uses to conduct its ongoing activities in order to make the most productive use of its resources.

Needs Assessment

Agency activities begin and end with the end-users of Agency research. The research agenda is based on an assessment of gaps in the knowledge base and on the needs of patients, clinicians, institutions, plans, purchasers, and State and Federal policymakers for evidence-based information. Input gained during the needs assessments feeds directly into the research initiatives undertaken by the Agency, as well as the products developed from research findings to facilitate use in health care.

Knowledge Creation

AHRQ will support and conduct research to produce the next generation of knowledge needed to improve the health care system. Building on the last 12 years of investment in outcomes and health care research, AHRQ will focus on national priority areas for which much remains unknown.

Translation and Dissemination

Simply producing knowledge is not sufficient; findings must be useful and made widely available to practitioners, patients, and other decision makers. The Agency will systematically identify priority areas for improving care through integrating findings into practice and will determine the most effective ways of doing this. Additionally, AHRQ will continue to synthesize and translate knowledge into products and tools that support its customers in problem solving and decision making. It will then actively disseminate the knowledge, products, and tools to appropriate audiences. Effective dissemination involves forming partnerships with other organizations and leveraging resources.

Evaluation

Knowledge development is a continuous process. It includes a feedback loop that depends on evaluation of the research's utility to the end user and impact on health care. In order to assess the ultimate outcomes of AHRQ research, the Agency will place increased emphasis on evaluation of the impact and usefulness of Agency-supported work in health care settings and policymaking. The evaluation activities will include a variety of projects, from smaller, short-term projects that assess process, outputs, and interim outcomes to larger, retrospective projects that assess the ultimate outcomes/impact of AHRQ activities on the health care system.

Priority Populations

Health services research has consistently documented the persistent, and at times great, disparities in health status and access to appropriate health care services for certain groups. The Agency's reauthorization legislation, P.L. 106-129, the Healthcare Research and Quality Act of 1999, mandated the creation of an Office of Priority Populations to continue and build the research and associated activities that AHRQ

undertakes on health care for priority populations to eliminate disparities. These populations include racial and ethnic minorities, women, children (including adolescents), the elderly, people with special needs (disabilities, chronic illness, end-of-life issues), low income populations and those from inner-city and rural (including frontier) areas with health care delivery issues. In FY 2000, AHRQ developed the structure for the Agency's Office of Priority Populations Research (OPPR) to continue focusing on developing science-based information to address issues of access to care, outcomes, quality, and the cost and use of services for each of these priority populations. In 2001 the Office of Priority Populations Research was established. A nationwide search is currently underway to recruit a leader in the field to serve as the Director of that office. Until a Director is recruited, the Deputy Director of the Agency has responsibility for overseeing OPPR priorities.

Training

AHRQ assures a strong infrastructure for health services research through investments in training and the support of young investigators. Critical areas of emphasis include:

- o bringing diversity to the health services research workforce by increasing the number of trained minority researchers;
- o instituting training programs to build research capacity in states that have not traditionally been involved in health services research, but are interested in developing the needed infrastructure;
- o training programs for junior-level researchers and mid-career scientists to emerging and innovative research methods; and
- o training programs that build curricula and foster innovative training approaches.

1.4 Partnerships and Coordination with Other Federal Agencies

AHRQ is not able to accomplish its mission alone. Partnerships formed with the agencies within the Department of Health and Human Services, with other components of the Federal Government, with State and local governments, and with private sector organizations play a critical role in enabling the Agency to achieve its goals.

Most of the Agency's partnerships are related to:

- ◆ The development of new research knowledge
 - o AHRQ co-funds individual research projects and sponsors joint research solicitations with agencies within HHS, such as NIH, CDC, and SAMHSA
 - o AHRQ co-funded research with the David and Lucille Packard Foundation.
- ◆ The development of tools, measures, and decision support mechanisms
 - o HRSA and AARP partnered with AHRQ to develop the Put Prevention into Practice Personal Health Guide for Adults Over 50.
 - o An increasing number of agencies (such as NIH, CMS, and the VA) are working closely with AHRQ's Evidence-based Practice Centers to

develop assessments of existing scientific evidence to guide their work.

- o Evidence reports are being used to develop clinical practice guidelines by organizations such as the American Psychiatric Association, American Academy of Pediatrics, American College of Obstetrics and Gynecology, American Academy of Physicians, the Consortium for Spinal Cord Medicine, American Academy of Cardiology, and American Heart Association.
- o The Healthcare Cost and Utilization Project (HCUP) is a long standing public-private partnership between AHRQ and 22 partner states to build a multi-state data system
- ◆ The translation of research into practice
 - o 14 companies/organizations have joined AHRQ in disseminating its Quality Navigational Tool designed to assist individuals apply research findings on quality measures and make major decisions regarding health plans, doctors, treatments, hospitals, and long-term care (e.g. Midwest Business Group on Health, IBM, United Parcel Service, National Consumers League).
 - o 14 organizations/companies have joined AHRQ in disseminating smoking cessation materials (e.g. American Cancer Society, American Academy of Pediatrics, Michigan Department of Community Health, Utah Tobacco Prevention and Control System).

**1.5 Summary FY 2001 Performance Report:
Accountability through Performance Measurement**

A summary table of program performance for FY 2001 follows:

STATUS OF AHRQ FY 1999-2003 PERFORMANCE MEASURES

Goal	Number Of Measures	Data Not Available	Number Of Measures Where Targets Were Achieved Or Exceeded*	Number of Measures where Targets Were Not Achieved
Goal 1: Establish future research needs based on user's needs. (HCQO)	FY 01: 1 FY 00: 1 FY 99: 1	FY 01: 0 FY 00: 0 FY 99: 0	FY 01: 1 FY 00: 1 FY 99: 1	FY 01: 0 FY 00: 0 FY 99: 0
Goal 2: Make significant contributions to the effective Functioning of the U.S. health care system through the creation of new knowledge. (HCQO)	FY 01: 8 FY 00: 7 FY 99: 5	FY 01: 0 FY 00: 0 FY 99: 0	FY 01: 8 FY 00: 7 FY 99: 5	FY 01: 0 FY 00: 0 FY 99: 0

Goal 3: Foster translation and dissemination of new knowledge into practice by developing and providing information, products, and tools on outcomes; quality; and access, use, and cost of care. (HCQO)	FY 01: 12 FY 00: 17 FY 99: 15	FY 01: 0 FY 00: 0 FY 99: 0	FY 01: 12 FY 00: 17 FY 99: 15	FY 01: 0 FY 00: 0 FY 99: 0
Goal 4: Evaluate the effectiveness and impact of AHRQ research and associated activities. (HCQO) (Note: All Agency evaluation activities, including MEPS-related studies, are included under Goal 4. This is because the MEPS budget line covers only costs associated with data design, data collection and analysis, and data products.)	FY 01: 17 FY 00: 11 FY 99: 7	FY 01: 0 FY 00: 0 FY 99: 0	FY 01: 17 FY 00: 11 FY 99: 7	FY 01: 0 FY 00: 0 FY 99: 0
GOAL 5: Support of initiative to improve health care quality through leadership and research. (HCQO)	FY 01: 6 FY 00: 6 FY 99: 6	FY 01: 0 FY 00: 0 FY 99: 0	FY 01: 6 FY 00: 6 FY 99: 6	FY 01: 0 FY 00: 0 FY 99: 0
Goal 6: Produce and release information from MEPS on health care access, cost, use, and quality.	FY 01: 4 FY 00: 6 FY 99: 11	FY 01: 0 FY 00: 0 FY 99: 0	FY 01: 4 FY 00: 6 FY 99: 11	FY 01: 0 FY 00: 0 FY 99: 0
Goal 7: Support the overall direction and management of AHRQ.	FY 01: 6 FY 00: 5 FY 99: 5	FY 01: 0 FY 00: 0 FY 99: 0	FY 01: 6 FY 00: 5 FY 99: 5	FY 01: 0 FY 00: 1 FY 99: 0

***Note: Includes performance which is within 5% of estimated target.**

As the table demonstrates, AHRQ performance for the output and process measures in the earlier performance plans has been excellent, and serves as a strong foundation for building future program performance goals. The future challenge will be to demonstrate excellent program performance as the plan evolves from one focused on outputs and process to goals with more outcome focus. More detail on AHRQ's 01 performance can be found in the appendix of this document.

PART II – PROGRAM PLANNING AND ASSESSMENT

"What we really want to get at is not how many reports have been done, but how many people's lives are being bettered by what has been accomplished. In other words, is it being used, is it being followed, is it actually being given to patients? [W]hat effect is it having on people?"

**Congressman John Porter, 1998
Chairman, House Appropriations
Subcommittee on Labor, HHS, and Education**

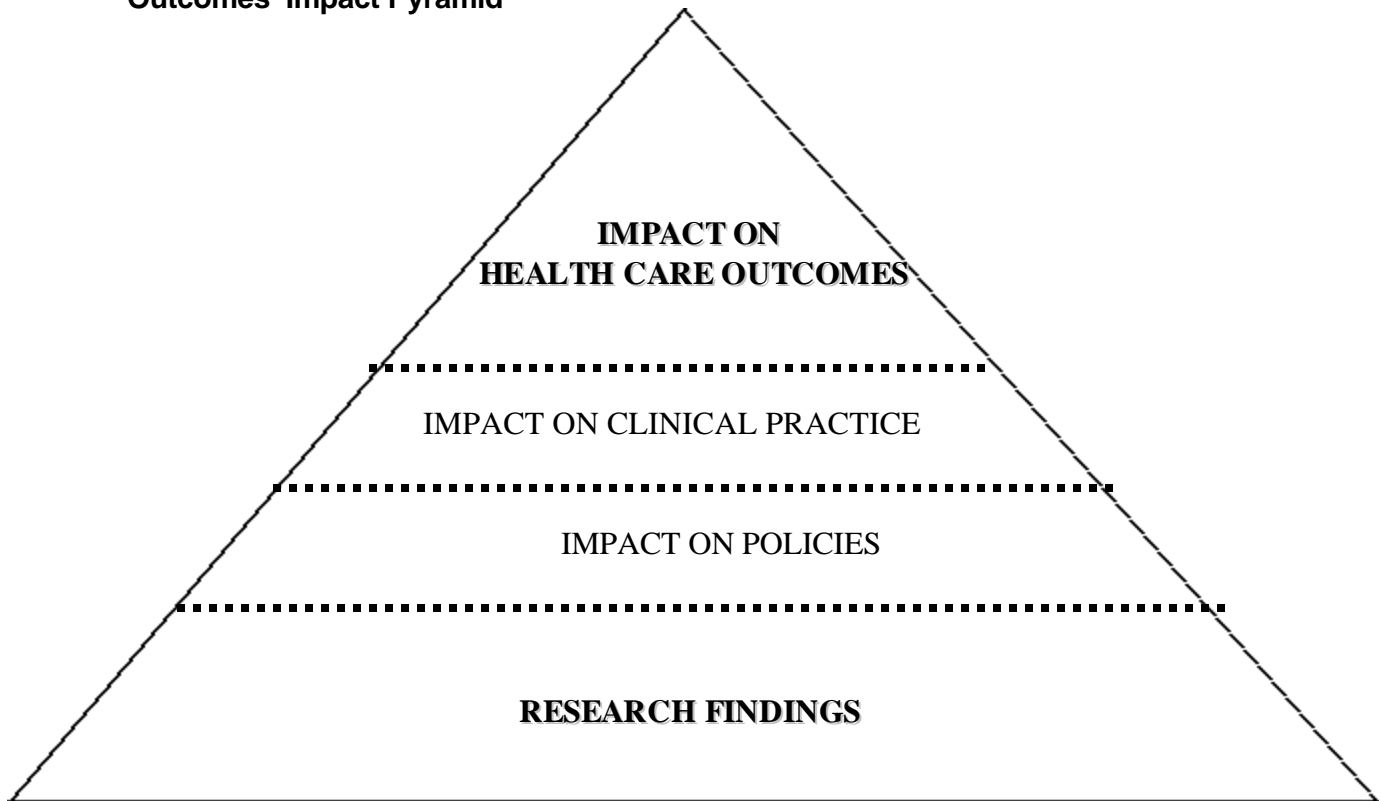
Introduction and Rationale:

The purpose of research is to produce information and knowledge that can inform decision-making. There is increasing awareness among those who provide and receive health care services, those who pay for those services and those who are making policy decisions that health care should be research led and that the services which are provided should be evidence based. As a result, research agencies must find a way to demonstrate the benefits of the research produced, not only in terms of how many research findings are published in professional journals but how the investment in research results in practical everyday applications which can be used by people who need information to make decisions about health care.

Demonstrating that research has led to tangible effects in the care provided to individual patients is difficult. Impact is rarely immediate. For example, we may learn that a health care organization has adopted a policy based on research funded by AHRQ, however, it might be several years before we know what effect it has had on patient care overall. Knowing that some clinicians, or health systems are changing their practice is different from knowing how overall practice patterns are being influenced and what the effect is on clinical outcomes.

To address the need to demonstrate the impact of research on people's health, AHRQ staff and consultants developed a "pyramid of outcomes" model that includes four different levels of impact beginning at the base with impact on knowledge and further research development and progressing to the impact on health outcomes.

Outcomes' Impact Pyramid



Stryer et al. (2000)

This model of assessing impact of AHRQ sponsored research forms the basis for the development of performance measures. Similarly, AHRQ must ensure that performance measures are developed to assess the impact of the research investment at all levels of the pyramid.

Performance measures aimed at the base of the pyramid focus on research that contributes to the health care knowledge base, leads to future research or both. Research at this level includes the development of tools and methods for research, instruments and techniques to assist clinical decision-making, and identify areas which do not have a sufficient evidence base. The process indicators that are developed to measure performance at this level of the pyramid assess the quantity or quality of activities that have the potential to contribute, at least indirectly, to helping AHRQ meet its strategic goals, or to monitor the establishment of major new initiatives or implementation of improvements in core activities where significant resources are involved or the potential for significance of the ultimate impact is high.

Output indicators are developed aimed at capturing the impact at the second and third level of the pyramid. Research at the second level of impact is research that results in the creation of a policy or program by a professional organization, health plans, hospitals, legislative bodies, regulators or accrediting organizations. Similarly, impact at level three of the pyramid is defined as research that results in a change in what clinicians or patients do, or changes in a pattern of care.

AHRQ has developed **outcome indicators** to measure impact at the fourth level of the pyramid, that is impact on the quality of care, actual health outcomes, cost of treatment or access to health care. Often, however, the connection between a particular research project and health outcomes is indirect and can take years to emerge. As a result, AHRQ has developed measures that utilize a “convergence of evidence” approach to establish a connection between research and outcomes. This involves identifying bodies of research which, when considered together, establish a connection between research and outcomes.

AHRQ Performance Indicators

Phase of initiative	Year One – research initiative starts	Years 3 - 5 – results received	Years 3 - 10 – results used in health care system
Indicator type	Process indicators	Output indicators	Outcome indicators
Indicator examples	Grants funded, creation of reports, partnerships formed	Publications, web site, dissemination, research findings, reports, products available for use in health care system	Results of evaluation studies, users stories, analysis of trend/other data

BUDGET AND PROGRAM AGGREGATION:

The AHRQ GPRA annual performance report and plans are aligned with the Agency's three budget lines:

- (1) Research on Health Care Costs, Quality, and Outcomes,
- (2) Medical Panel Expenditure Surveys, and
- (3) Program Support.

The first two budget lines are where Agency programs are funded. The goals associated with each of the budget lines represent core activities funded in each. The following two tables illustrate how the GPRA goals are aligned with the AHRQ budget lines.

Table I, representing the GPRA goals for FY 2001 and FY 2002 uses the cycle of research as a basic framework underpinning the development of goals and measures for AHRQ's budget line: Research on Health Care Costs, Quality and Outcomes.

Table 1: GPRA Framework FY 2001-2002

What the Indicators Address	GPRA Goal
Budget line 1: Research on Health Care Costs, Quality, and Outcomes	
Cycle of Research Phase 1: Needs Assessment	GPRA Goal 1: Establish Future Research Agenda Based on User's Needs
Cycle of Research Phase 2: Knowledge Creation	GPRA Goal 2: Make significant contributions to the effective functioning of the US health care system through the creation of new knowledge.
Cycle of Research Phase 3: Translation and Dissemination	GPRA Goal 3: Foster translation of new knowledge into practice by developing and providing information, products, and tools on outcomes, quality, access, cost and use of care.
Cycle of Research Phase 4: Evaluation	GPRA Goal 4: Evaluate the effectiveness and impact of AHRQ research and associated activities.
Lead role for quality initiative	GPRA Goal 5: Support Department-wide Initiative to Improve Health Care Quality through leadership and research.
Budget line 2: Medical Panel Expenditure Surveys	
Core MEPS activities	GPRA Goal 6: Collect current data and create data tapes and associated products on health care use and expenditures for use by public and private-sector decision makers and researchers.
Budget line 3: Program Support	
Agency management activities: contracts management and the AHRQ Intranet.	Goal 7: Support the overall direction and management of AHRQ

Beginning in FY 2003, AHRQ has redesigned our strategic management system and revised our GPRA goals to align more closely with the Agencies strategic plan. Table 2 shows this revision and realignment.

Table 2: FY 2003 GPRA Framework

What the Indicators Address	GPRA Goal
Budget line 1: Research on Health Care Costs, Quality, and Outcomes	
Strategic Goal 1: Strengthen Quality Measurement and Improvement	To have measurable improvement in the quality and safety of healthcare for Americans.
Strategic Goal 2: Support Improvements in Health outcomes	To have measurable improvement in the type of delivery system or processes by which care is provided and their effects on health care outcomes.
Strategic Goal 3: Identify Strategies to Improve Access, Foster Appropriate Use and Reduce Unnecessary Expenditures	To develop the evidence base for policy makers and health systems to use in making decisions about what services to pay for, how to structure those services, and how those services are accessed.
Budget line 2: Medical Panel Expenditure Surveys	
Core MEPS activities	To provide comprehensive, relevant and timely data on health care use and expenditures for use by public and private sector decision makers and researchers.
Budget line 3: Program Support	
Enhance the value of AHRQ as the leader in Healthcare Outcomes, Quality, Cost, Use and Access	Maximize the value of AHRQ by developing efficient and responsive business processes, aligning human capital policies and practices with AHRQ's mission, building an integrated and reliable information technology infrastructure

We believe that this realignment will help us determine how well the basic knowledge which forms the core of AHRQ's work provides information which can be turned into actions by clinical decision makers; purchasers and providers who make decisions about what services to use and pay for and how to structure those services; as well as by policy makers.

NOTE: A complete FY2001 performance report has been included in the Appendix.

FY 2001 GPRA Performance Report Results Executive Summary

The mission of the Agency for Healthcare Research and Quality is to conduct and sponsor research that will help improve the outcomes and quality of health care, reduce costs, address patient safety and medical errors, and broaden access to effective services. AHRQ's ability to sustain a high level of performance during fiscal year 2001 is evidenced by how its research has been used to provide better health care and the impact it has had on the delivery of health care services.

Among other activities, in fiscal year 2001, AHRQ:

- AHRQ's Evidence-Based Practice Centers (EPCs) researched 28 new topics. These included research into: seasonal allergies; diabetes; venous thrombosis; hyperbaric oxygen therapy treatment for brain injury and stroke; the management of bronchiolitis and coronary heart disease in women; vaginal birth following Caesarian sections; and, the diagnosis and treatment of Attention Deficit/Hyperactivity Disorder (ADHD) in children;
- The Integrated Delivery System Research Network (IDSRN) was charged with 16 projects focusing more on improving patient safety and working conditions for healthcare workers and reducing disparities in health care delivery;
- State participation in the Healthcare Cost and Utilization Project (HCUP) increased by 15% this past fiscal year or to 25 states in sum. HCUP was also expanded to include hospital-based ambulatory surgery databases. The pilot of emergency department databases was expanded from one to five states. AHRQ also announced the availability of the Kids' Inpatient Database (KID), the first comprehensive research database exclusively concerned with inpatient care of children and adolescents in the nation's community hospitals. Finally, HCUP data was made more available to the public through HCUPnet;
- AHRQ established nine Excellence Centers to Eliminate Ethnic/Racial Disparities (EXCEED). This 5-year effort will bring together teams of new and experienced investigators to analyze the factors that contribute to ethnic and racial inequities in health care and to identify practical tools and strategies to eliminate disparities;
- In 2001, AHRQ invested funds to evaluate health system responses to domestic violence. These studies are the first of their kind that will move beyond studying prevalence, screening, and training to take a rigorous look at health care interventions for domestic violence and their effectiveness. Victims will be evaluated over time to identify interventions that improve their health and safety, predict and improve health care use, prevent and reduce the occurrence of domestic violence, and develop better techniques to identify those at risk for domestic violence;
- In 2001, AHRQ supported child-relevant studies focused on outcomes, quality and patient safety, cost use and access;
- Concerning bioterrorism, this past year AHRQ funded, for example, research at the University of Alabama at Birmingham and the Research Triangle Institute that

yielded the development of Web-based training modules to teach health professionals how to address varied biological agents. Separate modules were created for emergency room practitioners, radiologists, pathologists, and infection control specialists. Clinicians can obtain continuing medical education (CME) credit via: <http://www.bioterrorism.uab.edu>;

- Based on the promising results from a pilot project, in 2001 AHRQ initiated a contract to continue funding the collaborative HIV Research Network project through 2005. Also, using AHRQ's Comprehensive Health Enhancement Support System (CHESS), an online services model for people facing major life crises, the University of Wisconsin at Madison showed that HIV-positive patients who are provided with CHESS software on home-based computer systems are more efficient users of health care. Having access to information, decision support, and connections to experts and other patients enabled 465 study patients to better monitor their health and alert their doctors when signs of serious illness appeared. These patients had lower health care costs, fewer hospitalizations, and shorter hospital stays than patients without access to CHESS. Treatment costs in one study were reduced by \$400 per month and patients spent 15 percent less time in the doctor's office because their self-management improved.
- The U.S. Preventive Services Task Force (USPSTF) this past year issued four recommendations covering chlamydia screening, lipid (high cholesterol) screening, skin cancer, and bacterial vaginosis in pregnancy. These are the first of 12 recommendations the Third USPSTF will release. The remainder are: chemoprevention (for example, tamoxifen and related drugs) to prevent breast cancer (new topic); vitamin supplementation to prevent cancer or coronary heart disease (vitamin E, folate, beta carotene, and vitamin C) (new topic); developmental screening in children (new topic); screening for diabetes mellitus (updated topic); newborn hearing screening (updated topic); counseling to prevent unintended pregnancy (updated topic); postmenopausal hormone therapy (updated topic); and, screening for depression (updated topic).
- As of 2001 year end, work on the National Quality Report (NQR) continues. A 14-member Institute of Medicine (IOM) committee of leading experts in quality and quality measurement was formed and recommended that the NQR quality monitoring system be based on a conceptual framework that addresses both dimensions of patient care (e.g., safety, effectiveness, patient centeredness, timeliness, equity) and patient needs (e.g., staying healthy, getting better, living with illness, coping with end of life issues). AHRQ initiated a call for measures to relevant federal agencies to identify candidate measures to populate the conceptual framework. The IOM issued a complementary call for measures to the private sector. Over 400 measures were submitted. An interagency workgroup is evaluating the candidate measures for inclusion in the first report using criteria suggested by the IOM (e.g., significance, scientific soundness, feasibility).
- Funded \$50 million in 94 new research grants, contracts and other projects to reduce medical errors and improve patient safety;
- Funded over 30 projects that will examine the effect of working conditions on health care workers' ability to provide safe, high-quality care in ambulatory, inpatient (both hospital and long term care institutions) and in home care settings;

The above listing only begins to capture the nature of AHRQ research and the Agency's role within the federal health care infrastructure. As the only federal agency specifically charged to provide information to those whom make decisions about health care, the research AHRQ sponsors and conducts supports the work of several federal agencies such as: the Food and Drug Administration (FDA); the National Institutes of Health (NIH); the Centers for Disease Control & Prevention (CDC); the Substance Abuse and Mental Health Services Administration (SAMHSA); the Center for Medicaid and Medicare Services; and, others. Leaders in these agencies and other federal and state government, private and not for profit leaders decision-makers are AHRQ's key constituent members.

Constituent or User Input is Key

Key to the Agency's success in carrying out its mission is its constituent or user-driven agenda. AHRQ regularly requests input from its users or stakeholders through a variety of vehicles, including: the National Advisory Council; expert meetings; Federal Register notices; and, public comments submitted through its web site, www.ahrq.gov. This user-driven research agenda may be thought of as a three-part research pipeline that:

1. Identifies and supports new research on priority health care issues;
2. Develops the tools and talent for knowledge creation; and,
3. Translates and disseminates research into practice.

New Research

The first pipeline segment is about health service delivery research that address important questions and/or inadequacies in the health care system. Further, it is about moving from the use of conventional practices in medicine to the use of the most valid or evidence-based scientific information available. The research is about outcomes, about links between processes and outcome, about how to measure quality and health expenditures.

In Fiscal Year 2001, AHRQ provided \$136 million to fund more than 401 new grants that were investigator initiated. The topics cover a range of health services research and effectively allows AHRQ to fund important research that may not fit within the parameters of an AHRQ-issued RFA (requests for applications). Additionally, the Agency funded 45 small conference grants (\$1.6 million) and 15 dissertation grants (\$500,000) also covering an array of topics.

Developing Tools and Talent

The second segment of AHRQ's pipeline concerns developing instruments and human resources to translate new knowledge into practice. Among the tools AHRQ uses in this regard are CAHPS (Consumer Assessment of Health Plans) and its Computerized Needs-Oriented Quality Measurement Evaluation System (CONQUEST), the quality measures derived from the Healthcare Cost and Utilization Project (HCUP) and Q-SPAN (Expansion of Quality Measures) and the quality improvement tools created by the use of Evidence Reports (ERs) and Technology Assessments (TAs). In the area of preventive care, AHRQ provides technical support for the U.S. Preventive Services Task Force (USPSTF), an independent panel of preventive health experts charged with

evaluating the scientific evidence for the effectiveness of a range of clinical preventive services.

AHRQ has partnered with a wide variety of Federal agencies, academic institutions and health care organizations. Decision-makers use the evidence developed through AHRQ-sponsored research and the tools developed from those findings to help make informed decisions about what works, for whom, when and at what cost.

Among the most visible examples of AHRQ's partnerships are its Evidence-Based Practice Centers (EPCs). For the past five years, AHRQ has been a science partner with leading public and private research institutions nationwide in conducting scientific reviews and syntheses of scientific literature. Each EPC has a five year contract to review assigned specific topics in clinical care. Nominations for these topics are routinely solicited from professional organizations, delivery systems and others as well as accepted on an on-going basis. Among the criteria for topic selection are whether these clinical care topics are common, expensive, and/or significantly relevant to Medicare and Medicaid populations.

With regard to talent, in fiscal year 2001 AHRQ created a new fellowship program in honor of Kerr White, a founder in the field of health services research. Along with the National Institutes of Health, AHRQ also expanded opportunities available under the National Research Service Award program to include sponsorship of individual pre-doctoral fellowships for under-represented minority students.

Translating Research

The final pipeline segment translates research into measurable improvements in health care. New knowledge with improved tools and talent are used to close the gap between what we know and what we do to improve health care cost, outcomes and quality.

For example, Translating Research into Practice (TRIP) grants are now in their second round. TRIP II, amounting to \$5.7 million and double the number of the first round of TRIP grants, focuses on seven specific areas: six found in the race and disparities initiative (infant mortality, cancer screening and management, cardiovascular disease, diabetes, HIV infection/AIDS and immunizations); and, pediatric asthma. Each of these TRIP II grants requires partnerships among researchers, health care systems and organizations to evaluate strategies for improving quality of care. The TRIP program will result in more rapid uptake of research results by providing an incentive for health care organizations to evaluate alternative improvement strategies.

To complement this initiative and further foster partnerships in Fiscal Year 2001, AHRQ awarded 18 planning grants equally \$1.3 million. This funding supports the efforts of the PBRNs (Practice-Based Research Networks) to design systems that will facilitate the translation of research into practice and to assess the impact of these systems on care delivered.

Additionally, AHRQ has partnered with nine Integrated Delivery System Networks (IDSRN) to link the nation's top researchers with the some of the country's largest health care systems. As a group, the networks provide health services to over 34 million Americans, including the privately insured, Medicare and Medicaid patients and the uninsured. This new model of field-based research will enable AHRQ to accelerate the

pace of its research regarding key concerns such as medical care quality and safety, access to services and costs.

Finally, AHRQ oversees the Put Prevention Into Practice (PIPP) initiative, which serves as the implementation vehicle for USPSTF's age-specific and risk factor-specific recommendations on preventive care.

Evaluations

To understand AHRQ's impact on health service delivery, additional emphasis is being placed on evaluation activities. As a result, AHRQ was able to report on both process, output and interim outcome goals for its major initiatives. The Fiscal Year 2001 evaluation portfolio included a number of evaluations that assessed the impact of research products used to inform customers, measure quality, and make policy decisions. Evaluations completed this year are:

1. Assessment of Past Agency Activities on Disabilities
2. Background Research in Support of the Development of an Institutional CAHPS Survey
3. Development and Analysis of HCUP- The Healthcare Cost and Utilization Project
4. Development of a Conceptual Framework for a Healthcare Disparities Report
5. Development of Point of Service Assessments for the Office of Management
6. Evaluation of Data Sources Used in Research on Health Care Markets
7. Evidence Report on the Efficacy of Behavioral Dietary Interventions to Reduce Cancer Risks
8. Health Services Research Education: Assessing Customer Satisfaction & Program Needs
9. Improving the Process for Tracking Research Impact
10. Study of the Per Patient Cost and Efficacy of Treatment for Temporomandibular Joint (TMJ) Disorders

Leadership on Health Care Quality

The Agency frequently uses the phrase, "quality research for quality healthcare." This underscores AHRQ's commitment to research on quality measurement as well as quality improvement. In this area, over 80 AHRQ-funded investigators are now studying issues as far ranging as:

1. Quality improvement in caring for newborns with jaundice;
2. The comprehensiveness of prescription drug coverage as a measure of quality care among elderly beneficiaries with chronic health conditions; and,
3. Identification of hospital-based quality improvement interventions that are most effective in increasing use of beta-blockers after acute myocardial infarction.

AHRQ has taken a lead role in the QuIC (Quality, Inter-Agency Coordination) Task Force efforts to address medical errors and patient safety in the U.S. Sadly, every hour, 10 Americans die in a hospital due to avoidable errors and another 50 are disabled. As part of its efforts to improve patient safety and reduce medical errors, the QuIC Task Force has published Five Steps to Safer Health Care. The five steps were distilled from an earlier AHRQ publication, "20 Tips to Reduce Medical Errors." Those evidence

based recommendations provide patients with guidance on how to improve their safety and have been widely adopted across the government through the QulC. As an example, the OPM (Office of Personnel Management) has included them in this year's health benefits brochure. AHRQ also coordinated publication of the landmark report, *Doing What Counts for Patient Safety—Federal Actions to Reduce Medical Errors and Their Impact*, a response to the 1999 Institute of Medicine (IOM) report, *To Err is Human*.

As the Department's leader on healthcare quality, AHRQ has continued funding patient safety research. The agency in FY 2001 awarded 94 grants (\$50 million) covering a diverse array of topics in the field.

In collaboration with the National Center for Health Statistics (NCHS) and other agencies, AHRQ continues its foundational work for the first annual report ever produced on U.S. healthcare quality, the National Quality Report (NQR). When completed in FY 2003, the NQR will show how the system is faring and where improvements will be needed.

Health Care Disparities

A similar agency effort is underway to produce a National Disparity Report. This work, also targeted for release in 2003, will address prevailing disparities in health care delivery as it relates to racial and socioeconomic factors in the priority populations of rural, inner-city, low-income and minority groups; women; children; the elderly; and individuals with special health care needs. Life expectancy and overall health have improved for many Americans but too many racial and ethnic minorities still suffer disproportionately from diabetes, cancer, and other diseases. We believe that through our research partnerships, we can expand the magnitude of our efforts to ensure that all Americans receive high quality and necessary health care services.

MEPS

Concerning cost and utilization, AHRQ continues to conduct the Medical Expenditure Panel Survey (MEPS) that provides up-to-date, highly detailed information on how Americans as a whole, as well as different segments of the population, use and pay for health care.

MEPS data has been used to inform policy decisions in numerous public and private sector agencies. For example, MEPS data was used to establish baseline measures for the Healthy People 2010 objective on oral health and preventive dental visits; to compare estimates of prices paid for drugs by elderly and nonelderly persons with and without health insurance for prescribed medications; to validate actuarial models; to help create a profile of the population living with chronic illness; to estimate national health expenditure rates for the elderly; and, to inform estimates of out-of-pocket expenditures by individuals not covered by the government or their own insurance policies. Customer satisfaction in using MEPS has been rated high (90%) and feedback from recipients of MEPS data indicated that the data were timely and useful.

More generally, the data currently collected from MEPS will support quality of health care research directed to the following broad areas: access to care; patient/customer

satisfaction; health insurance coverage; health status; and, health services utilization and expenditures. The planned MEPS enhancements call for a significant household survey sample expansion of individuals with certain illnesses of national interest in terms of patient satisfaction with care received, the quality of the care and the burden of disease. The intent of this planned enhancement is to permit more focused analyses of the quality of care received for these special populations. It was recommended that the following medical conditions be given special attention for implementing MEPS healthcare quality enhancements: diabetes; asthma; hypertension; stroke; ischemic heart disease; arthritis; and, COPD (chronic obstructive pulmonary disease). Diabetes and ischemic heart were identified because these diseases are also priorities of the national health disparities research.

DEPARTMENT
OF HEALTH
AND HUMAN
SERVICES

Agency for Health Care Research and Quality

FISCAL YEAR **2002** REVISED FINAL PLAN

FISCAL YEAR **2001** PERFORMANCE
REPORT

2.1 Budget line 1 -- Research on Health Care Costs, Quality, and Outcomes

Funding Levels:	FY 2001	\$226,385,000 (Actual – Current Law)
	FY 2001	\$227,897,000 (Actual – Proposed Law)
	FY 2002	\$247,645,000 (Appropriation)
	FY 2002	\$249,171,000 (Current Estimate)
	FY 2003	\$194,000,000 (Request – Current Law)
	FY 2003	\$195,611,000 (Request – Proposed Law)

This budget line represents the bulk of the Agency's research (extramural and intramural) portfolio. Dissemination and evaluation activities are also included. The first five of the annual performance plan's six goals are used to track Agency performance in these areas.

GPRA GOAL 1: Establish Future Research Needs Based on User's Needs. (HCQO)

Strategy: Cycle of Research Phase 1:Needs Assessment

In the field of health services research, the user of the information plays a critical role. If health services research is to improve the quality of health care, it must provide answers to the questions and issues that represent the barriers to improvement. AHRQ emphasizes open communication with users of its research to ensure that it is addressing important questions. Through continued emphasis on the first phase of the cycle of research, needs assessment, AHRQ will continue to assure that the Agency's research *begins and ends with the user*.

Types of Indicators: Output

Use of Results by AHRQ:

Input received on specific topic areas and health care issues are used in the Agency's program and budget development activities. The result is research agendas and program initiatives that are informed by the real needs of the user community.

Data Issues:

To provide context for reviewing the advice received from users, AHRQ reviews major articles in the research literature pertaining to a particular subject area. This allows the Agency to assess where the user input fits into the current body of research and how best to proceed. Through a 1999 study conducted by the Lewin Group, we learned that user input loses much of its critical meaning when aggregated. The Agency has, therefore, created a data management system that will, in its final stage, electronically store the source document and have word search capability so that staff can identify relevant documents and access them efficiently from their desk top computers when

performing program and budget development activities. Additionally, to ensure that the input from users is incorporated into Agency activities, a number of check points have been integrated into the planning processes where user input is explicitly identified and assessed in relation to the proposed activities.

GPRA Goal 1 – FY 2001 Results

Objective 1.1: Define direction of FY project funding priorities, in large part, by needs assessment activities.

1st Indicator: Agency research agenda covering strategic goal areas for FY 2001 priorities (patient safety and informatics) is documented based on consultations with various groups.

Results: A Patient Safety Reporting Summit with relevant public and private sector stakeholders was held on April 23-24, 2001 in Reston, VA. Secretary Thompson opened the summit, with over 300 attendees.

AHRQ sponsored IT expert meetings at the spring and fall American Medical Informatics Association (AMIA) conferences on electronic medical records and a expert meeting on child health and information technology. AHRQ participated in IT meetings at Ambulatory Pediatrics Association and American Medical Association (e-health) annual meetings. In addition the agency contracted Health Strategies Consultancy for an assessment of AHRQ’s role in IT within DHHS.

GPRA Goal 1 – FY 2002 Indicators

Goal 1 Objectives	FY 2002 Indicator
Objective 1.1: Define direction of FY project funding priorities, in large part, by needs assessment activities.	Agency research agenda covering strategic goal areas for FY 2002 priorities (investigator-initiated research, national quality report, national disparities report) is documented by July 2002 based on consultations with various groups.

GPRA GOAL 2: Make significant contributions to the effective Functioning of the U.S. health care system through the creation of new knowledge. (HCQO)

Strategy: Cycle of Research Phase 2: Knowledge

There are many gaps in knowledge in all areas of health care. New questions emerge as new technologies are developed, the population's demographics change, areas of inquiry previously under-emphasized take on greater importance, and research previously undertaken identifies further areas that need attention. Therefore, AHRQ will continue to focus on creating new knowledge through its peer reviewed extramural and intramural research and assessing the findings that result from completed projects.

Type of Indicators: Process and Output

Use of Results by AHRQ: AHRQ uses three approaches to illustrate how it addresses its core activity of creating new knowledge. First, the Agency documents science advances that have resulted from its investment of funds, staff, and other resources. This enables the Agency to do the following:

- ◆ identify and highlight significant research findings from research funded or sponsored by AHRQ;
- ◆ focus its translation and dissemination activities to maximize the potential use of critical findings in the health care system;
- ◆ annually assess progress toward filling the gap between what we know and what we need to know about health care.

Second, AHRQ documents coverage in major journals and/or evidence of use of research findings. Coverage by popular and professional media is highly competitive. AHRQ's receiving coverage is an initial indication that its investment in research has the potential for significant impact when disseminated and implemented widely. The actual use of the findings by purchasers, professional associations, managed care organizations, and/or insurers also signals that the new knowledge has the potential to make a difference. The ultimate outcome or impact will be evaluated after the finding has been implemented over a period of time.

Third, the statistics on the number of grants funded and dollars invested in particular areas are used to determine whether the AHRQ portfolio has a significant body of work underway to begin to inform the field. They are also used in gauging the investment in these areas vs. other programs as AHRQ allocates its resources.

Data Issues:

Project officers in consultation with grantees largely do collecting data and/or anecdotes on the use of research results or tools through searches of the literature, media outlets, and Internet listings and tracking. The information is captured through regular communications with partners, researchers, associations, and Federal, State, and local governments. Anecdotal information is used only when it can be verified with the actual user. Documentation of the use is sought whenever possible. AHRQ continues to look for ways to introduce efficiencies in this labor-intensive effort.

GPRA Goal 2 – FY 2001 Results

Objective 2.1: Determine annually the salient findings from research in each of the three areas (outcomes; quality; and cost, access, and use) and develop plan for next steps translation and dissemination.

1st Indicator: Produce an annual report that describes at least 12 science advances covering the three research goal areas (outcomes; quality; cost, access, and use). For each finding, specific steps in translation and dissemination are identified and initiated.

Results: AHRQ has identified at least 12 science advances. These findings are highlighted in the AHRQ Accountability Report which is being submitted to Congress under separate cover. The following list exemplifies the types of findings contained in this report as well as how the findings were disseminated:

ROUTINE MEDICAL TESTING PRIOR TO CATARACT SURGERY (Effectiveness): Cataract PORT II

Finding: Routine medical testing prior to cataract surgery doesn't improve outcomes and in most cases is unnecessary.

EDUCATIONAL PROGRAM FOR NURSING HOME PHYSICIANS AND STAFF TO REDUCE USE OF NON-STEROIDAL ANTI- INFLAMMATORY DRUGS AMONG NURSING HOME RESIDENTS: A CONTROLLED TRIAL

Finding: The educational program and algorithm described in this study could help reduce the overuse of NSAIDs in elderly nursing home patients. May 2001 *Medical Care*

A QUALITATIVE STUDY OF INCREASING BETA-BLOCKER USE AFTER MYOCARDIAL INFARCTION (Quality)

Finding: A newly tested classification system may help hospitals to identify areas of improvement and then to make successful quality care improvements. May 23, 2001 *Journal of the American Medical Association*

A RANDOMIZED CLINICAL TRIAL OF OUTPATIENT GERIATRIC EVALUATION AND MANAGEMENT

Finding: Targeting outpatient geriatric evaluation and management (GEM) slows a patient's functional decline in his or her daily activities. April 2001 *Journal of the Am. Geriatrics Society*

MANAGEMENT OF DENTAL PATIENTS WHO ARE HIV POSITIVE

Finding: The antifungal medication, fluconazole, may help prevent the development of thrush in the mouths of HIV-infected patients. August 2001 *Oral Surgery, Oral Medicine, Oral Pathology*.

2nd Indicator: Generate 2 - 3 synthesis reports on research findings and practical applications on Agency priority topics.

Results: AHRQ has, to date, completed two synthesis reports highlighting research findings related to Patient Safety and End of Life Care for patients. In addition a Fact Sheet on Diabetes was developed for use by clinicians and their patients. The research synthesis entitled "Reducing and Preventing Adverse Drug Events To Decrease Hospital Costs" can be found at the following URL <http://www.ahrq.gov/qual/aderia/aderia.htm>.

Objective 2:2: Achieve significant findings from AHRQ sponsored and conducted research.

1st Indicator: Findings from at least 40 AHRQ sponsored or conducted research are used by public and private partners to improve health care.

Results: Numerous examples of AHRQ sponsored and conducted research that has either been published in the peer review literature or that illustrates how findings are used by public and private partners to improve health care can be found in AHRQ's electronic publication "Research Activities". This publication can be accessed using the following URL: <http://www.ahrq.gov/>.

The following is a brief list of articles and projects that can be found in this publication:

Ayanian J. (2001) Increased mortality among middle-aged women after myocardial infarction: Searching for mechanisms and solutions. *Annals of Internal Medicine*. 134:239-241.

Basu J. (2001) Access to primary care: The role of race and income. A study of municipal health services clinics. *Journal of Health and Social Policy*. 13(4):57-73.

Burstin H, Lewin, D and Hubbard, H. (2001) Future directions in primary care research: Special issues for nurses *Policy, Politics, and Nursing Practice*. 103:103-107.

Coppola K, Ditto P, Danks J, and Smucker W. (2001) Accuracy of primary care and hospital-based physician's prediction of elderly outpatient's treatment preferences with and without advance directives. *Archives of Internal Medicine*. 161:431-440.

Ditto P, Danks J, Smucker W, and others. (2001) Advance Directives as acts of communication. *Archives of Internal Medicine*. 161:421-430.

Fernandez A, Grumbach K, Vranizan K, and others. (2001) 'Primary care physicians' experience with disease management programs. *Journal of General Internal Medicine*. 16:163-167.

Fink K, Baldwin L, Lawson H and others. (2001) The role of gynecologists in providing primary care to elderly women. *Journal of Family Practice*. 50(2):153-158.

Franks P. (2001) Impact of patient socioeconomic status on physician profiles: A comparison of census-derived and individual measures. *Medical Care*. 39(1): 8-14.

Frazier L, Colditz G, Fuchs C and Kuntz K. (2000-Oct) Cost-effectiveness of screening for colorectal cancer in the general population. *Journal of the American Medical Association*. 284(15): 1954-1961.

Galsgow R and Bull S. (2001) Making a difference with interactive technology: Consideration in using and evaluating computerized aids for diabetes self management education. *Diabetes Spectrum*. 14(2): 99-106.

Kiefe K. (2001). Improving Quality Improvement Using Achievable Benchmarks Of Care Feedback. *Journal of the American Medical Association*. June 13, 2001

Malkin J, Broder M and Keeler E. (2000-Oct) Do longer postpartum stays reduce newborn readmissions? Analysis using instrumental variables. *Health Services Research*. 35(5 pt 2):1071-91.

Murphy J, Chaing H, Montgomery J, Rogers W and Safran D. (2001) The quality of physician-patient relationships. *Journal of Family Practice*. 50(2): 123-129.

Pathman DE. (2000). State Scholarship, Loan Forgiveness, And Related Programs: The Unheralded Safety Net. *Journal of the American Medical Association*. October 25 2000

Rollman B, Gilbert T and others. (2001). The electronic medical record. *Archives of Internal Medicine*. 161:189-197. (R01 HS09421)

Safran D, Montgomery J, Chang H, Murphy J and Rogers W. (2001). Switching doctors: Predictors of voluntary disenrollment from a primary physician's practice. *The Journal of Family Practice*. 50(2): 130-135

Siminoff LA. (2001). Factors Influencing Families Consent To Donation Of Solid Organs For Transplantation. *Journal of the American Medical Association*. July 4, 2001

In addition, AHRQ has issued press releases describing the findings and conclusions of 45 studies that were funded or sponsored by AHRQ. Media coverage of these studies includes at least 996 newspaper and magazine articles and over 500 online news reports and television and radio stories. Coverage ranged from 225 newspaper articles, 175 television and radio reports and numerous online news stories for a study on ear surgery to 10 key health care trade press reports for a study of declining health insurance enrollment.

Objective 2.3: Initiate FY Research Initiatives.

Funding of a minimum of 60 projects in the following areas:

- Reducing Medical errors and Enhancing Patient Safety
- Using Computers and Information Technology to Prevent Medical Errors
- Working Conditions

Results: AHRQ has invested \$50 million to fund 94 new research grants, contracts and other projects to reduce medical errors and improve patient safety. This initiative represents the federal government's largest single investment to address the estimated 44,000 to 98,000 patient deaths related to medical errors each year. The 94 projects will be carried out at state agencies, major universities, hospitals, outpatient clinics, nursing homes, physicians' offices, professional societies and other organizations across the country. These projects will address key unanswered questions about how errors occur and provide science-based information on what patients, clinicians, hospital leaders, policymakers and others can do to make the health system safer. The results of this research will identify improvement strategies that work in hospitals, doctors' offices, nursing homes and other health care settings across the nation.

This \$50 million research initiative is the first phase of a multi-year effort. Many institutions will receive additional funds to continue their work in future years. These projects reflect the input of consumers, health care providers and policymakers from a

national research summit last year led by AHRQ and its partners on the Quality Interagency Coordination (QuIC) Task Force. These projects fall into the following six major categories of awards:

Supporting Demonstration Projects to Report Medical Errors Data: These activities include 24 projects for \$24.7 million to study different methods of collecting data on errors or analyzing data that are already collected to identify factors that put patients at risk of medical errors.

Using Computers and Information Technology to Prevent Medical Errors: These activities include 22 projects for \$5.3 million to develop and test the use of computers and information technology to reduce medical errors, improve patient safety, and improve quality of care.

Understanding the Impact of Working Conditions on Patient Safety: These activities include eight projects for \$3 million to examine how staffing, fatigue, stress, sleep deprivation, and other factors can lead to errors. These issues—which have been studied extensively in aviation, manufacturing and other industries—have not been closely studied in health care settings.

Developing Innovative Approaches to Improving Patient Safety: These activities include 23 projects for \$8 million to research and develop innovative approaches to improving patient safety at health care facilities and organizations in geographically diverse locations across the country.

Disseminating Research Results: These activities include seven projects for \$2.4 million to help educate clinicians and others about the results of patient safety research. This work will help develop, demonstrate and evaluate new approaches to improving provider education in order to reduce errors, such as applying new knowledge on patient safety to curricula development, continuing education, simulation models, and other provider training strategies.

Additional Patient Safety Research Initiatives: AHRQ will use the remaining \$6.4 million for 10 other projects covering other patient safety research activities, including supporting meetings of state and local officials to advance local patient safety initiatives and assessing the feasibility of implementing a patient safety improvement corps.

A brief list of specific projects funded can be found in the appendix of this report.

GPRA Goal 2 – FY 2002 Indicators

Goal 2 Objectives	FY 2002 Indicator
<p>Objective 2.1: Determine annually the salient findings from research in each of the three areas (outcomes; quality; and cost, access, and use) and develop plan for next steps translation and dissemination.</p>	<p>Produce an annual report that reports on at least 18 science advances covering the three research goal areas (outcomes; quality; cost, access, and use).</p> <p>For each finding, specific steps in translation and dissemination are identified and initiated.</p> <p>Increase by 15% (relative to FY01 baseline) the number of synthesis reports generated on research findings and practical applications on Agency priority topics.</p> <p>Patient Safety Establish baseline for number of science advances in patient safety covering the three research goal areas (outcomes; quality; and cost, access, and use) that will be included in future accountability reports to the Congress.</p> <p>Generate at least one synthesis report on research findings and practical application in the area of patient safety</p>
<p>Objective 2.2: Achieve significant findings from AHRQ sponsored and conducted research. (This objective is combined with Objective 3.1 in FY 2002)</p>	<p>Discontinued (This measure is combined with 3.1 in FY 2002.)</p>
<p>Objective 2.3: Initiate FY Research Initiatives.</p>	<p>Fund or conduct a minimum of 50 projects in the following areas:</p> <ul style="list-style-type: none"> • Patient Safety • Translating Research into practice • Healthcare Cost and Utilization Project • Medical Expenditure Panel

GPRA GOAL 3: Foster translation and dissemination of new knowledge into practice by developing and providing information, products, and tools on outcomes; quality; and access, use, and cost of care. (HCQO)

Strategy: Cycle of Research Phase 3: Translation and Dissemination

AHRQ is committed to ensuring that the knowledge gained through health care research is translated into measurable improvements in the American health system. AHRQ is focusing on closing the gap between what we know and what we do. Under the “Translating Research Into Practice” initiative, the Agency invests in demonstration projects, public (Federal, state, and local government) and private-sector partnerships, and targeted dissemination activities to develop and test implementation strategies in different settings in the health care system and demonstrate their applicability to widespread dissemination in other areas of the system.

Types of Indicators: Output and process.

Use of Results by AHRQ:

The indicators regarding number of partnerships, attendees at User Liaison Program meetings, or hits on the AHRQ web site help the Agency determine whether what it produces is of use to major audience segments. The Agency evaluates the results of the GPRA plan indicators in combination with other information such as details about what products were released, feedback from attendees at programs, where the hits are on the web site, and feedback from customers to manage and improve its dissemination efforts.

Frequently, the results of research are not readily implemented in the health care system without an interim step such as the creation of a tool that facilitates use. A major focus for the Goal 3 indicators, therefore, is to look at the creation and use of tools. The indicators for the Agency’s investment in training helps the Agency track its success in furthering the field of health services research by fostering new talent. The numbers of trainees funded are a reflection of Agency commitment and the success of the training programs in attracting successful candidates. This data can be used in combination with other information about individual trainees, their research projects, professional credentials of professors and mentors, etc. to assess the overall success of the program.

Data Issues:

The AHRQ has implemented several computer-based reporting tools to monitor usage of Agency information systems and websites. Accurate statistics are recorded on the usage of the National Guideline Clearinghouse, Publications Clearinghouse, and various other Agency websites and systems using commercially available reliable and accurate tools, e.g., WebTrends. These tools are used by many corporations and government agencies nationwide to monitor usage and have been certified by various information

technology testing and review groups. Information on all grants, which can be word searched, is included in the Agency Management Information System.

AHRQ tracks print media (newspapers, health care-related trade journals and newsletters, and consumer magazines) and on-line news services for stories about or involving the Agency through a contractor, Burrelle's -- one of the Nation's largest and oldest news clipping services. The contractor, Video Monitoring Service, monitors TV and radio news reports on selected studies in major markets around the United States.

Agency program staff maintains other statistics during the normal monitoring of contracts and grants. Certain items, such as the release of a CONQUEST product, are documented on the AHRQ web site when ready so that consumers are aware of the availability. Other items such as the statistics on the ULP program are monitored through the management of the support contracts, travel arrangements, and other records kept in administering the program. Anecdotal information is verified with the primary source before being used by the Agency in this report or for any other uses.

GPRA Goal 3 – FY 2001 Results

Objective 3.1: Achieve significant findings from AHRQ sponsored and Conducted research and maximize dissemination of information, tools, and products developed from research results for use in practice settings.

1st Indicator: At least 5 public-private partnerships are formed to implement research findings for decision makers.

Results: The following examples of public-private partnerships

- ◆ A meeting was held in June 2001 to discuss opportunities for collaboration and to attempt to match up select TRIP-IIs and PROs. Participants included staff from both AHRQ and CMS (HCFA). The focus of the meeting was to explore how AHRQ could be more strategic in working with PROs to implement findings from TRIP-II as well as the broader array of TRIP related projects. Three potential areas for closer interaction are: 1) improving our understanding of the effectiveness of implementation interventions; 2) involving PROs in research; and, 3) developing a research agenda for implementation research. Specific plans were made to hold a meeting hosted by AHRQ and CMS to focus on defining what information the PROs and their customers need in their quality improvement activities and setting a research agenda.
- ◆ In cooperation with the Kantor Family Foundation, AHRQ developed a task order to clarify important issues for patients and clinicians relevant to developing a national outcomes database to inform clinical

decisions about treatment alternatives based on knowing what happens to “People Like Me”.

- ◆ AHRQ worked with Blue Cross and Blue Shield of Minnesota to develop a provider resources kit, based on the Public Health Service (PHS) Guideline, *Treating Tobacco Use and Dependence*, which is currently being focus tested with several physicians within the plan’s network. This resources kit contains a number of smoking cessation materials to aid physicians in treating patients who smoke and will be distributed to the entire network of physicians in Minnesota.
- ◆ Identified and implemented two specific opportunities for promoting research that uses CEA to inform decisions.

2nd Indicator:

Formation of a minimum of 10 partnerships to support dissemination of AHRQ products through intermediary organizations, such as health plans and professional organizations. AHRQ has completed seven public-private partnerships. The partners’ activities include, but are not limited, to reprinting and disseminating the information to their constituencies, web linking, and the electronic dissemination of AHRQ materials.

Results: AHRQ continues to be successful in forming partnerships with intermediary organizations that support dissemination of AHRQ products. To date, AHRQ has completed seven public-private partnerships. The partners’ activities include, but are not limited, to reprinting and disseminating the information to their constituencies, web linking, and the electronic dissemination of AHRQ materials. Examples of these partnerships include:

- ◆ American Academy of Family Physicians
- ◆ American Medical Informatics Association
- ◆ Society of Academic Emergency Medicine
- ◆ American Association of Health Plans
- ◆ Merck’s Institute for Aging Research
- ◆ Department of Veterans Affairs Health Services Research and Development QUERI program
- ◆ Centers for Medicare and Medicaid

AHRQ’s successful collaboration with these partners resulted in the following activities:

- ◆ AHRQ, through collaborative efforts with the agency’s National Advisory Council (NAC), nursing organizations, AHRQ nurses and others, is establishing outreach paths to the nursing research community. The hope is to facilitate dissemination of AHRQ products through all segments of the health care arena, and, at the same time, to enhance nursing research at AHRQ.
- ◆ In March 2001, AHRQ sponsored a meeting that included nurses from AHRQ, NAC, the American Academy of Nurses, and the Council on Advancement of Nursing Sciences. At this meeting two lists were developed for use by the review staff at AHRQ and members of peer review groups. One list was of nursing journals to be used as peer-reviewed journals when referencing nursing research. The other list

was of nurses that can be recruited to serve as peer reviewers for AHRQ-sponsored research proposals. In addition, a series of steps were developed to promote research opportunities for nurses. Following the meeting, in May 2001, as further encouragement for nursing research at AHRQ, an article was written by AHRQ staff and published in *Policy, Politics, and Nursing Practice* entitled, "Future Directions in Primary Care Research: Special Issues for Nurses". A follow-up meeting is planned for FY02.

- ◆ AHRQ partnered with the American Association of Health Plans to convene a conference, "Building Bridges VII: Assessing Policy Decisions and Their Impact on Health Care Delivery," April 25-27, 2001. Other partners included CDC, BlueCross BlueShield Association, and the National Institute on Disability and Rehabilitation Research. AHRQ disseminated information about how health plan decision makers and researchers could use both Healthcare Cost and Utilization Project (HCUP) data and Consumer Assessment of Health Plans (CAHPS) data for comparative analyses, forecasting, and benchmarking within managed care settings.
- ◆ AHRQ worked with the Tobacco-Free Coalition of Oregon to develop a smoking cessation tools kit, based on the PHS Guideline, *Treating Tobacco Use and Dependence*, which will be distributed in bulk quantities to all health plans in Oregon.
- ◆ AHRQ worked with the National Educational Association (NEA) to place a tobacco ad in their newsletter and promote the entire product line in the March issue of "NEA Today." The NEA also distributed a flier, which lists the entire PHS smoking cessation product line, to NEA staff.
- ◆ AHRQ worked with the American Cancer Society to distribute 550 copies of the *You Can Quit Smoking* consumer guides to 11 GIANT Food Store Pharmacies on the East Coast in time for the Great American Smokeout.
- ◆ AHRQ collaborated with Smoke Free Families to develop an intervention piece for the pregnant smoker, based on the PHS Guideline *Treating Tobacco Use and Dependence*. This piece will be distributed to OB/GYNs and will be promoted in talks with other groups interested in addressing pregnant smokers.
- ◆ AHRQ worked with the Kansas State Employees Health Care Commission to distribute the following AHRQ publications: *Staying Healthy at 50+*, *Child Health Guide*, *Personal Health Guide*, and *Your Guide to Choosing Quality Health Care* to all Kansas state employees.
- ◆ AHRQ worked with the American Association of Health Plans (AAHP) to facilitate dissemination of *Staying Healthy at 50+* to the HMO trade

group's 1,000 member health plans by supplying them with sample copies of the publication and by announcing the availability of the publication in its member newsletters.

- ◆ AHRQ worked with the Connecticut Department of Social Services, Elderly Services Division, to distribute the following PPIP publications at various seminars and presentations for area care facilities: *Staying Healthy at 50+* (English and Spanish), *Personal Health Guide* (English and Spanish) and the *Adult Preventive Care Timeline*.
- ◆ AHRQ worked with Health First Health Plans in Florida to distribute the English-language versions of *Staying Healthy at 50+*, *Child Health Guide*, and the *Personal Health Guide* to its members. The publications were distributed via separate mailings to its Medicare, Commercial and Youth populations accompanied by a letter from the plans' Quality Management Director.
- ◆ AHRQ worked with John Deere Health to distribute *Staying Healthy at 50+* to John Deere Health's senior Risk enrollees in the post-enrollment packets along with their benefit booklet and member ID card.

3rd, 4th and 5th Indicator: The number of hits on the Web site, the number of documents uploaded and the number of inquiries handled on the web site.

Results: AHRQ has invested significant resources in developing a user friendly web site that allows real time access to a variety of products produced by AHRQ. Use of AHRQ's web site continued to increase in FY2001 with more than 22.6 million hits compared with 18.8 million hits the previous year. User sessions also rose by almost a million visits – 2.4 million up from 1.5 million in FY2000. Page views increased substantially for FY2001 at 8.9 million compared with 5.4 million the previous year. Overall workload increased with 5,068 files and documents uploaded to the Web site, compared with 4,400 for FY2000.

In addition, AHRQ handled 4,006 electronic inquiries during FY2001 through its Web site Mailbox, up from 3,500 the previous year. These inquiries included requests for Agency information products, funded research, consumer health issues and concerns, technical assistance, referrals to other resources, and requests to use AHRQ electronic content on other Web sites or in electronic or print products.

6th Indicator: Number of State and local governments trained in the understanding and use of health services research findings through ULP Workshops.

Results: In FY 2001, ULP sponsored 23 different activities, including 12 National workshops, 7 state-based workshops, one telephone conference and one Web-assisted audio-conference. These activities provided over 2300 health care policy makers from all 50 states, the District of Columbia, American Samoa, the Virgin Islands and Guam with access to research findings they could use to make evidence-based decisions about health care.

Objective 3.2: Develop and facilitate the use of new tools, talent, products, and implementation methodologies stemming from research portfolio.

1st Indicator: Produce evidence summaries for use in Federal direct care providers' efforts to create guidelines.

Results: Nine evidence summaries that were produced in FY 01 were used by Federal direct care providers to create guidelines including:

- ◆ Impact of Cancer-related Decision Aids
- ◆ Defining/Management of Chronic Fatigue Syndrome
- ◆ Diagnosis/Management of Parkinson's Disease
- ◆ Management of Post-Term Pregnancy
- ◆ Evaluation/Management of Stroke, Effectiveness and Cost
- ◆ Effectiveness of Echocardiography and Carotid Ultrasound
- ◆ Making Health Care Safer: A Critical Analysis of Patient Safety Practices
- ◆ Management of Chronic Asthma
- ◆ Otitis Media with Effusion
- ◆ Management of Neurogenic Pain

The findings from AHRQ sponsored and conducted research has been used by public and private partners to inform the development of guidelines or other quality improvement tools. The following four examples illustrate how public and private partners have used evidence developed by AHRQ to improve the quality of care received:

- ◆ **Treatment of Pulmonary Disease Following Spinal Chord Injury -** The VA Spinal Chord Injury Quality Enhancement Research initiative (SCI QUERI) is considering this evidence report as it develops quality improvement strategies for translating evidence into practice for patients with spinal chord injury treated within the VA healthcare system.
- ◆ **Making Health Care Safer: A Critical Analysis of Patient Safety Practices** -This evidence report has been disseminated to members of the National Forum for Health Care Quality Measurement and Reporting (NQF), which includes a variety of stakeholders, including Federal direct care providers such as the Veteran's Administration and the Department of Defense. This report should be useful to these providers as well as private and public purchasers, employers, consumers, and accrediting bodies, in developing effective strategies for reducing medical errors and improving patient safety.
- ◆ **Evaluation and Treatment of New Onset Atrial Fibrillation in the Elderly** -The North Carolina Peer Review/Quality Improvement Organization (PRO), as part of its efforts under the National Stroke Project sponsored by the Centers for Medicare and Medicaid Services, has widely disseminated copies of the AHRQ-sponsored evidence report on Atrial Fibrillation to physicians and hospitals that

treat atrial fibrillation patients across the state. In addition, a physician opinion leader presented the findings of the report to an audience of 246 health care professionals during a teleconference on preventing strokes in patients with atrial fibrillation. Participants had the opportunity to discuss the finding with an expert panel. Rates of warfarin prescription prior to discharge of patients with atrial fibrillation have been measured for the state and will serve as a baseline for assessing improvements in practice over time. The PRO is also providing a data abstraction tool to hospitals in the state that will enable them to assess their performance on this measure and assist in targeting quality improvement efforts.

- ◆ **US Preventive Services Task Force (USPSTF)** -The Centers for Medicare and Medicaid Services (CMS) is using USPSTF recommendations based on AHRQ-sponsored systematic evidence reviews to develop messages (based on focus group testing) for consumers and clinicians regarding Medicare-covered services for osteoporosis, cervical cancer, prostate cancer and breast cancer.

2nd Indicator: EPCs will produce a minimum of 12 evidence reports and technology assessments that can serve as the basis for interventions to enhance health outcomes and quality by improving practice.

Results: In FY 01, AHRQ-supported EPC's produced the following 18 Evidence Reports and 3 Technology Assessments that can serve as the basis for interventions to enhance health outcomes and quality by improving practice.

Evidence Reports

- ◆ Impact of Cancer-related Decision Aids (McMaster U. EPC)
- ◆ Chronic Fatigue Syndrome (San Antonio EPC)
- ◆ Diagnosis/Management of Parkinson's Disease (MetaWorks EPC)
- ◆ Management of Post-Term Pregnancy (Duke EPC)
- ◆ Methods to Rate Strength of Scientific Evidence (RTI/UNC EPC)
- ◆ Evaluation/Management of Stroke, Effectiveness and Cost Effectiveness of Echocardiography and Carotid Ultrasound (OHSU EPC)
- ◆ Utilization of Physician Services (RAND EPC)
- ◆ Refinement of HCUP Quality Indicators (UCSF/Stanford EPC)
- ◆ Making Health Care Safer: A Critical Analysis of Patient Safety Practices (UCSF/Stanford EPC)
- ◆ Management of Chronic Asthma (BC/BS EPC)
- ◆ Otitis Media With Effusion (RAND EPC)
- ◆ Management of Neurogenic Pain (McMaster U. EPC)
- ◆ Ayurvedic Interventions for Diabetes Mellitus (RAND EPC)
- ◆ Feasibility Study: Use of Hyperbaric Oxygen Therapy for Stroke and Brain Injury (OHSU EPC)
- ◆ Management of Allergic Rhinitis (NEMC)
- ◆ Diagnosis and treatment of Repetitive Motion Disorders (ECRI)
- ◆ Bioterrorism, Training for Rare Public Health Events (JHU)

Technology Assessments

- ◆ Actinic Keratosis (OHSU EPC)
- ◆ PET for Breast Cancer (BC/BS EPC)
- ◆ Pneumatic Compression for Venous Insufficiency (intramural)

Note: Summaries of Evidence Reports, Final Reports and Technical Supplements can be found at the following ULP: www.ahrq.gov

3rd Indicator: Support a minimum of 165 pre- and post-doctoral trainees.

Results: AHRQ provided support for approximately 176 pre and postdoctoral students through a variety of mechanisms including individual pre-doctoral fellowships (4 students), individual postdoctoral fellowships (7 students), dissertation grants (15 students) and institutional training program grants (75 pre-doctoral students and 75 postdoctoral students).

4th Indicator: Support up to 3 Minority Research Infrastructure Support Program (M-RISP) grants in order to develop the health services research capabilities of traditionally minority-serving institutions.

Results: Three M-RISP projects will be supported, reflecting a multidisciplinary blend of clinical and nonclinical perspectives and partnerships. Support will be provided for the development of health services research infrastructure in these institutions. Awardees include the University of Hawaii, Tennessee State/Meharry Universities, and the University of Texas at Galveston, which respectively serve large numbers of Asian/Pacific Islanders, African Americans, and Hispanic students. Research foci of funded centers will include preventative medicine, health disparities, quality of care, and medical effectiveness.

5th Indicator: Support up to 6 Building Research Infrastructure and Capacity (BRIC) two-year planning grants in EPSCOR states and states which historically have received little or no research support from AHRQ.

Results: AHRQ will provide support for planning associated with the development of research infrastructures in four institutions located in states that historically have not received significant health services research funding. Recipients will include institutions located in states such as Kentucky, Louisiana, Utah, and a consortium of the intermountain states of Nevada, Montana, Idaho and Wyoming. These projects emphasize a variety of health services research interests that draw upon multidisciplinary perspectives to address critical issues pertaining to child health, primary care, health care quality, and rural and frontier health care.

6th Indicator: Fund at least 10 projects in tool development.

Results: AHRQ, through intramural and extramural research, has funded more than 10 projects in the development of new tools and facilitated their use in diverse health care delivery systems. The following are selected examples:

- ◆ Development of a series of Web-based, user-friendly quality indicators for improving the quality of inpatient and ambulatory health care to include: (1) AHRQ's prevention/access indicators, and (2) Mortality/utilization indicators. These indicators resulted from a refinement and expansion of the original HCUP Quality Indicators.
- ◆ Development of clinical classifications software (ICD-10). This tool includes categories that can be employed in many types of projects analyzing data on diagnoses. For example, they can be used to identify populations for disease – or procedure – or specific duties, provide statistical information about relatively specific conditions, and define comorbidities.
- Publication of the HCUP Fact Book. This Fact Book was produced as a tool to provide statistics and information on procedures performed in U.S. hospitals. The book provides information on the most common procedures, characteristics of patients who receive procedures, procedures associated with the longest hospital stays, the most expensive hospitalizations, and the highest in-hospital mortality. Elixhauser A, Klemstine K, Steiner C, Bierman A. Procedures in U.S. Hospitals, 1997. Rockville (MD): Agency for Healthcare Research and Quality: 2001. HCUP Fact Book No.2; AHRQ Publication NO. 01-0016 ISBN 1-58763-029-X.
- Kids' Inpatient Database (KID): Nation's First Database Devoted Solely to Children's Hospital Care. The KID is the only dataset on hospital use, outcomes, and charges for children age 28 and younger, including newborns, regardless of whether they were privately insured, received public assistance, or had no health insurance. The KID is the most recent tool in a family of databases, Web-based products, and user friendly software developed as part of HCUP.
- Release of the 1998 and 1999 State Inpatient Databases (SID – 15 states) and State Ambulatory Surgery Databases (SASD – 7 states) – powerful health care research and policy analysis tools. The SID contains information for every inpatient hospitalization in each participating state, while the SASD captures information on surgeries performed at hospital-affiliated ambulatory surgery sites. These research resources are part of a family of databases and software tools developed as part of HCUP.

GPRA Goal 3 – FY 2002 Indicators

Goal 3 Objectives	FY 2002 Indicator
<p>Objective 3.1: Maximize dissemination of information, tools, and products developed from research results for use in practice settings.</p>	<p>Increase by 15% (relative to FY 2001 baseline) the number of state and local governments trained and/or receiving technical assistance through User Liaison Program (ULP).</p> <p>Identify at least 5 new and important on-going partnerships with public and private-sector organizations to disseminate and implement AHRQ sponsored or conducted research findings.</p> <p>Synthesis of at least 5 grant portfolio areas on quality of care across Agency's goals for persons with chronic care needs produced and disseminated with particular focus on outreach to managed care executives.</p> <p>Patient safety research findings will be disseminated to 1000 providers through the Patient safety dissemination and education program.</p> <p>Augment the family of CAHPS instruments to include a Group Practice Level Survey.</p> <p>Increase by 15% (relative to the FY 2001 baseline) the number of publications of AHRQ funded and conducted research.</p> <p>Establish a baseline of electronically available tools and publications that bring AHRQ research to our intended audiences - policymakers, clinicians, State and local officials, health care systems and researchers.</p>
<p>Objective 3.2: Develop and facilitate the use of new tools, talent, products, and implementation methodologies stemming from research portfolio. (This is objective 3.3 in FY 99-00).</p>	<p>Fund or conduct at least 5 projects in tool and data development.</p> <p>Fund or conduct at least 5 projects in tool and data use.</p> <p>Provide technical assistance to 30 new users of CAHPS tools.</p> <p>Obtain data for the National CAHPS Benchmarking Database from 10 new sponsors of CAHPS surveys.</p> <p>HIV Research Network data will be used to produce 3</p>

	<p>analyses on disparities or quality.</p> <p>Training Programs Establish at least 1 Patient Safety Investigator training programs.</p> <p>Support at least 5 new career development or research infrastructure grants to help to ensure the existence of an adequate cadre of future health services researchers to address existing and emerging research priorities.</p> <p>Evidence-based Practice Centers Produce evidence summaries for use in Federal direct care providers' efforts to increase evidence-based care.</p> <p>Produce a minimum of 18 evidence reports, systematic evidence reviews, and technology assessments that may serve as the basis for interventions by Federal and other direct care providers, professional associations, and other healthcare organizations to increase evidence-based practice and enhance health outcomes and quality.</p> <p>For at least four evidence reports or technology assessments work with partners to measure how the reports or assessments were used and what impact they had on clinical decision making and patient care.</p>
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GPRA Goal 4: Evaluate the effectiveness and impact of AHRQ research and associated activities. (HCQO) (Note: All Agency evaluation activities, including MEPS-related studies, are included under Goal 4. This is because the MEPS budget line covers only costs associated with data design, data collection and analysis, and data products.)

Strategy: Cycle of Research Phase 4:Evaluation

As explained in other portions of this document, interim outcomes of research can be evaluated on a relatively short-term basis. However, the ultimate outcome of how the research affects people receiving health care or people interacting with the system requires large, expensive retrospective studies. AHRQ is implementing a growing portfolio of evaluations that will show, iteratively, the outcomes of the investments of Agency funds.

Types of indicators: Interim outcomes of research

Use of results by AHRQ:

AHRQ conducts evaluations of its major programs or products to achieve one or more of the following:

- ◆ evaluate the current state of the program or product including impact in health care;
- ◆ improve customer satisfaction with the program or product;
- ◆ target or prioritize future activities to increase their usability or usefulness.

Data Issues:

Many of the evaluations are conducted with the assistance of consultants who are highly skilled in evaluation research and/or the subject matter. Some are done through surveys for customer satisfaction that were cleared through OMB. The third category is evaluations conducted through consultations with experts and users to obtain direct feedback on a particular product. In order to ensure the integrity of the evaluations, the AHRQ staff assigned to these projects are not program staff responsible for the day-to-day administration of the program. Additionally, advice on the evaluation questions as well as on the interpretation and use of the results is often sought from experts on the AHRQ National Advisory Council.

GPRA Goal 4 – FY 2001 Results

Objective 4.1: Evaluate the impact of AHRQ sponsored products in advancing methods to measure and improve health care.

Evidence Reports:

1st Indicator: Use of evidence reports and technology assessments to create quality improvement tools in at least 10 organizations.

Results: Twenty-one examples are listed of Organizations and their uses of evidence reports to create tools for improving health care quality:

- ◆ **Treatment of Attention Deficit and Hyperactivity Disorder (ADHD)** -The American Academy of Pediatrics (AAP) is developing a clinical practice guideline based on the AHRQ-sponsored evidence report on this topic that is expected to be issued in October 2001.
- ◆ **Venous Thromboembolism** -The Eastern Association for Surgery of Trauma has developed a guideline submitted to the Journal of Trauma Surgery based on an AHRQ-sponsored evidence report on this topic.
- ◆ **Anesthesia Management During Cataract Surgery and Treatment of Co-Existing Cataract and Glaucoma** -The American Academy of Ophthalmology (AAO) has considered this evidence report in developing a Preferred Practice Parameter for Cataract in the Adult Eye. The practice parameter will be issued in September 2001 and will be posted on the AAO's website and disseminated to new ophthalmic residents.

- ◆ **Treatment of Co-Existing Cataract and Glaucoma** -The American Academy of Ophthalmology (AAO) has considered this evidence report in developing a Preferred Practice Parameter for Cataract in the Adult Eye. The practice parameter will be issued in September 2001 and will be posted on the AAO's website and disseminated to new ophthalmic residents.
- ◆ **Use of Epoetin in Oncology** -The American Society of Hematology/American Society of Clinical Oncology (ASH/ASCO) has developed a guideline based on an AHRQ-sponsored evidence report on this topic.
- ◆ **Pharmacotherapy for Alcohol Dependence** -The American Society of Adolescent Medicine (ASAM) has developed a guideline based on an AHRQ-sponsored evidence report on this topic that will be published in late 2001.
- ◆ **Evaluation and Treatment of New Onset Atrial Fibrillation in the Elderly** -The ACP-ASIM, with representation from AAFP, has developed a guideline based on the AHRQ-sponsored evidence report on this topic. The American College of Cardiology (ACC), in conjunction with the European Society of Cardiology, is also planning to develop a guideline based on this report.
- ◆ **Management of Neurogenic/Neuropathic Pain Following Spinal Cord Injury** -In response to the findings of this evidence report revealing insufficient information on which to base an evidence-based guideline, the Paralyzed Veterans of America Steering Committee has approved a proposal to use the evidence report to plan a strategy for stimulating collaborative research to fill the evidence gaps in this field.
- ◆ **Otitis Media with Effusion** -The American Academy of Pediatrics (AAP) has convened a panel to develop guidelines based on an AHRQ-sponsored evidence report on this topic.
- ◆ **Acute Bacterial Sinusitis in Children** -The American Academy of Pediatrics (AAP) developed a practice guideline based on the AHRQ-sponsored evidence report that will appear in *Pediatrics* in September. There will be a session to promote the guideline at the next AAP annual meeting and a CME program on the guideline is being developed. This evidence report was also considered in the development of guidelines by the American College of Physicians (ACP) and the CDC, as well as the Sinus and Allergy Health Partnership (a partnership composed of the American Academy of Otolaryngic Allergy, the American Academy of Otolaryngology-Head and Neck Surgery and the American Rhinologic Society).
- ◆ **Criteria for Referral of Patients with Epilepsy** -The American Academy of Neurology (AAN) and the American Epilepsy Society (AES) sponsored an Epilepsy Guideline Topic Forum at the most recent AES meeting (December 2000) and plan to develop a guideline on this topic, based on the AHRQ-sponsored evidence report, beginning in September 2001.
- ◆ **Management of Acne** -AHRQ partners, the American Academy of Pediatrics (AAP) and the American Academy of Dermatology (AAD), are currently using the evidence report in the development of guidelines for the treatment of acne. The completed guidelines is expected by the end of 2002. These guidelines will be disseminated

through each professional society, including publication in the Journal of AAD and in Pediatrics.

- ◆ **Acute Otitis Media** -The American Academy of Pediatrics (AAP) and the American Association of Family Practitioners has convened an expert panel that is in the final stages of developing a clinical practice guideline based on this evidence report.
- ◆ **Management of Post-operative Atrial Fibrillation** -When this evidence report is completed it will be used by the American College of Chest Physicians to develop a clinical practice guideline.
- ◆ **Stable Angina** -The American College of Cardiology/American Heart Association has developed a guideline based on this evidence report.
- ◆ **Use of Epoetin in Oncology** -The American Society of Hematology/American Society of Clinical Oncology Guideline Development Committee is using this evidence report as the basis for development of a clinical practice guideline.
- ◆ **Cervical Cytology** -The methodology used for this evidence report has been adapted for use by an expert-working group (Consensus Panel on Cervical Cancer Screening) advising the American Cancer Society on development of new guidelines for cervical cancer screening.
- ◆ **Management of Cancer Pain** -The American Pain Society will use the evidence report to update their guideline on management of cancer pain. The evidence report was cited by a recently published IOM report titled *Improving Palliative Care for Cancer*.
- ◆ **Management of Acute Exacerbations of Chronic Obstructive Pulmonary Disorder (COPD)** -This evidence report was used by the American College of Chest Physicians and the American College of Physicians-American Society of Internal Medicine Joint Expert Panel on Chronic Obstructive Pulmonary Disease to develop a clinical practice guideline for management of acute exacerbations of chronic obstructive pulmonary disease.
- ◆ **Pulmonary Complications after Spinal Cord Injury** -The Spinal Cord Injury Consortium (funded by Paralyzed Veterans of America) is in the process of convening an expert panel to develop a clinical practice guideline based on evidence summarized in the report.
- ◆ **US Preventive Services Task Force (USPSTF)** -The American Association of Family Practitioners (AAFP) is using new USPSTF recommendations based on four AHRQ-sponsored systematic evidence reviews in updating AAFP recommendations for preventive care. AAFP has also adapted the new USPSTF evidence rating system, released in the April 2001 issue of the *American Journal of Preventive Medicine* for developing prevention recommendations and policies for its members.

2nd Indicator: For at least four evidence reports or technology assessments per year, work with partners to measure how the reports or assessments were used and what impact they had on clinical.

Results: The following six examples show how AHRQ worked with various partners to measure the impact of evidence reports on clinical practice:

- ◆ **Diagnosis and Treatment of Attention Deficit/Hyperactivity Disorder (ADHD)** –AHRQ’s partner, the American Academy of Pediatrics (AAP) is launching a three-pronged campaign to promote implementation of its guidelines on diagnosis and treatment of ADHD. The guidelines are based on the two AHRQ-sponsored evidence reports on these topics. The campaign will address providers, parents, and payers/purchasers. Tool kits will be developed for providers, containing resources such as reminder cards and flow sheets, to facilitate adoption of guideline recommendations within pediatric practices. In addition, a module on ADHD will be added to the AAP’s Educational Quality Improvement Program (EQiP), a web-based interactive training tool and database that will offer educational case studies and enable practitioners to compare practice patterns related to the guidelines with those of other practitioners. A companion parent education pamphlet will also be developed and disseminated via AAP members and a more detailed informational book, written for a lay audience, will be distributed. Outreach to payers and purchasers will be accomplished through a series of regional meetings. AAP hopes to evaluate the effectiveness of the program, particularly the provider tool kits, in a second phase using the PROS (Pediatric Research in Office Settings).
- ◆ **Acute Otitis Media** -AHRQ has awarded a task order, under the ISDRN contract, to the Lovelace Clinic Foundation to facilitate implementation and evaluation of guidelines based on the AHRQ-sponsored evidence report on Acute Otitis Media. The project involves: 1) development of a clinical practice guideline based on the evidence report; 2) implementation of the guideline within the Lovelace Health Systems, a large integrated managed care delivery system in Albuquerque, New Mexico, based on an Episode of Care (EOC) model; measurement of the impact and evaluation of the effectiveness of the implementation strategies; and assessment of the difference in outcomes by ethnicity and socioeconomic status. The goal of the project is to enhance understanding of the most effective methods of changing physician and patient behavior to promote adherence to evidence-based guidelines.
- ◆ **Venous Thromboembolism** -Based on the research gaps identified in the AHRQ-sponsored evidence report on this topic, a multi-centered trial (US and Canada) has been launched to obtain more definitive evidence regarding best treatment practices for venous thromboembolism.
- ◆ **Evaluation and Treatment of New Onset Atrial Fibrillation** -The North Carolina Peer Review/Quality Improvement Organization (PRO), as part of its efforts under the CMS-sponsored National Stroke Project, has widely disseminated copies of the AHRQ-sponsored evidence report on Atrial Fibrillation to physicians and hospitals that treat atrial fibrillation patients across the state. In addition, a physician opinion leader presented the findings of the report to an audience of 246 health care professionals during a teleconference on preventing strokes in patients with atrial fibrillation. Participants had the opportunity to discuss the finding with an expert panel. Rates of warfarin prescription prior to discharge of patients with atrial fibrillation

have been measured for the state and will serve as a baseline for assessing improvements in practice over time. The PRO is also providing a data abstraction tool to hospitals in the state that will enable them to assess their performance on this measure and assist in targeting quality improvement efforts.

- ◆ **Diagnosis and Treatment of Dysphagia/Swallowing Problems in the Elderly** -Based on the results of this evidence report, AHRQ is working with relevant healthcare and research organizations to develop a research agenda that would facilitate filling in the gaps in the evidence in order to improve clinical practice surrounding treatment of swallowing problems in the elderly.
- ◆ **Use of Ethropoietin in Hematology and Oncology** -AHRQ provided grant funding for an investigator from Northwestern University to conduct a baseline survey of EPO use patterns among clinician members of the American Society for Clinical Oncology (ASCO) and the American Society of Hematology (ASH). Results of this survey will serve as a benchmark that will be useful in measuring and evaluating how the introduction of the ASH/ASCO clinical practice guideline, based on the AHRQ-sponsored evidence report, are affecting clinical practice.

3rd Indicator: Findings from at least 3 evidence reports or technology assessments will affect State or Federal health policy decisions.

Results: The following twelve examples are listed of the effects of evidence reports and technology assessments on the health policy decisions of State and Federal agencies:

- ◆ **Efficacy of Interventions to Modify Dietary Behavior Related to Cancer Risk** -- The National Cancer Institute served as partner and funder of the AHRQ-sponsored evidence report on this topic. The evidence report was incorporated into a Review for the National Cancer Policy Board (a joint NCI/IOM collaboration) on behavioral interventions in cancer prevention and early detection. In June, 2001 the Research subcommittee of the 5 A Day Steering Committee noted the evidence report in developing a strategic plan for new research priorities. The NCI has broadly disseminated the report. They have posted a link to the report on their website and have highlighted it at a variety of investigator meetings, including the NCI Nutrition Behavior Change investigators meeting and the American Institute for Cancer Research Conference.
- ◆ **Technology Assessment on Actinic Keratosis** -- This technology assessment was used by the Centers for Medicare and Medicaid Services (CMS) as a basis for a coverage decision. On July 19, 2001 CMS announced that the Coverage Issues Manual will be revised to indicate that Medicare will cover the destruction of actinic keratosis, without restrictions based on lesion or patient characteristics, using surgical or medical treatment methods, including but not limited to: cryosurgery with liquid nitrogen; curettage; excision; and photodynamic therapy.
- ◆ **Diagnosis and Prevention of Dental Caries** -- This evidence report was used as the basis for a NIH Consensus Development Conference (CDC). This was the first Federal CDC to base its findings on an evidence-based systematic review. Subsequent to the success of this effort, the NIH Office of

Medical Applications of Research Consensus Development Conference program and AHRQ developed a clearly defined coordination process to provide systematic reviews on an ongoing basis for NIH CDCs. Prior to every Consensus Development Conference, an AHRQ Evidence-based Practice Center (EPC) develops an evidence report based on a rigorous systematic review and analysis of the scientific literature on the Conference topic. The EPC clinical experts and methodologists present their report findings and conclusions to the Consensus Conference panel and at the Consensus Conference. The Conference panel then can incorporate the findings of the EPC into their final Conference report. This insures that they have an impartial review of the best evidence when they are making their recommendations.

- ◆ **Oral Health and HIV** -- This evidence report was the basis of a State of the Science conference sponsored by NIH and NIDCR in December 2000.
- ◆ **Telemedicine for the Medicare Population** -- CMS is using this evidence report to develop a research agenda.
- ◆ **Criteria to Determine Disability in Patients with Chronic Renal Failure** -- Based on this evidence report the SSA concluded there is insufficient evidence to change their policy regarding disability determination for End Stage Renal Disease (ESRD) patients.
- ◆ **Management of Hepatitis C** -- This project will generate a report that will be used by an NIH-sponsored Consensus Development Conference on Management of Hepatitis C.
- ◆ **US Preventive Services Task Force (USPSTF)** -- Consistent with recommendations in a recent Institute of Medicine (IOM) report, Sen. Bob Graham has introduced legislation in Congress that would establish a fast-track approval process for decisions on coverage of clinical preventive services recommended by the USPSTF, based on AHRQ-sponsored systematic evidence reviews.
- ◆ **Diagnosis and Monitoring of Osteoporosis in Postmenopausal Women** - An AHRQ-sponsored evidence report on this topic was used by the panel of the National Institutes of Health Consensus Development Conference on Osteoporosis Prevention, Diagnosis and Therapy, held March 27-29, 2000.
- ◆ **Cervical Cytology** -- Findings from this evidence report have been considered by the National Breast and Cervical Cancer Detection Program and the Expert Panel on HPV Infection and Sequelae at the CDC, as well as the Advisory Panel on Microbiological Devices of the FDA. They were also used by the US Preventive Services Task Force in developing recommendations for cervical cancer screening.
- ◆ **Management of Cancer Pain** -- This evidence report will be updated and used in the upcoming National Institutes of Health State-of-the-Science Conference on Symptoms Management in Cancer.
- ◆ **Management of Uterine Fibroids** -- The Steering Committee of the Cooperative Multicenter Reproductive Medicine Network of the National Institute of Child Health and Human Development (NICHD) is using this evidence report to help develop research projects for the Network. The results of the report were also presented to the Annual Meeting of Directors of Programs in Reproductive Medicine who receive grants funded by NICHD. The results were also presented to the Advisory Council of the National Institute of Environmental Health Sciences, for assistance in strategic planning of the research agenda for the Institute. This report is also being

used by the Obstetrics and Gynecology Devices Branch of the Food and Drug Administration to evaluate issues in the regulatory evaluation of medical devices used in the treatment of women with fibroids.

4th Indicator: Use of evidence reports or technology assessments and access to NGC site informed organizational decisionmaking in at least 4 cases and resulted in changes in health care procedures or health outcomes.

Results: The impact of AHRQ-sponsored research is evident in the following examples of organizational decision making informed by evidence reports, technology assessments and data availability at the NGC Web site:

- ◆ **US Preventive Services Task Force (USPSTF) --** USPSTF recommendations, based on AHRQ-sponsored systematic evidence reviews (SER's), formed the basis of an effort by the nonprofit group Partnership for Prevention to prioritize recommended clinical preventive services to facilitate decision making among purchasers, payers, and health plans about coverage and delivery of clinical preventive services. The study, released in June 2001, prioritizes clinical preventive services based on their health impact and cost effectiveness. The release of this report received significant national media attention and the National Healthcare Purchasing Institute will distribute 4,000 copies of a related monograph for employer-purchasers. It is expected that this report will have widespread impact on policy makers and organizational decision makers in considering issues related to coverage of clinical preventive services.
- ◆ **Rehabilitation for Traumatic Brain Injury in Children and Adolescents --** Based on results of the AHRQ-supported evidence report on this topic, Aetna U.S. Healthcare announced a change in national coverage policy. As of February 2, 2000, consistent with the findings of the evidence report, Aetna allows payment for cognitive rehabilitation as adjunctive treatment of cognitive deficits when specified criteria are met.
- ◆ **Cervical Cytology --** The findings of this evidence report have been considered by two large HMOs -- Excellus Healthcare (Blue Cross/Blue Shield of upstate NY) and Henry Ford (Detroit) – to develop coverage policies with respect to cervical cancer screening using the new liquid-based technologies. In addition, the cost-effectiveness model from this report is being used by a major pharmaceutical company to assist in the planning and evaluation of a human papillomavirus vaccine.
- ◆ **Management of Uterine Fibroids --** This evidence report is being used by the Society for Cardiovascular and Interventional Radiologists to design a prospective registry for measuring outcomes in women undergoing uterine artery embolization. Study design and choice of outcome measures were largely guided by the findings of the evidence report. Intermountain Health Care, a large integrated health system in Utah, is considering use of the report to develop guidelines for management of women with fibroids, as well as potential evaluations of the impact of the guidelines on patient care.
- ◆ **Criteria for Clinical Guidelines --** An article based on this AHRQ-sponsored EPC report that reviews AHCPR's former guidelines and provides criteria for when clinical guidelines should be updated an/or withdrawn, will be published in the British Medical Journal and will be useful to organizations that develop

and adapt clinical practice guidelines in making decisions about updating and withdrawing outdated guidelines.

Research

5th Indicator: At least 3 examples of how research informed changes in policies or practices in other Federal agencies.

Results: AHRQ research has been used by several federal agencies to structure policies and practices. Examples are listed below:

- ◆ AHRQ's research portfolio on low income populations has informed HRSA's work on evaluating and improving the health care safety net.
- ◆ AHRQ-funded research on guideline development and implementation has influenced the recommendations on professional education/performance measurement made by the Secretary's Advisory Committee on Genetic Testing (an NIH-led effort).
- ◆ AHRQ-sponsored research conducted by Richard Zimmerman, M.D. on the effect of the Free Vaccine program on delivery of immunizations in primary care settings has supported the efforts of CDC to continue that program.
- ◆ The National Cancer Policy Board issued a white paper on the volume-outcome relationship in cancer surgery on July 12 that includes a table based on HCUP analyses. The paper contains research recommendations that were informed by the clarity HCUP data brought to the understanding of potential impact of selective referral recommendations.

In addition, AHRQ is working to document impact case studies of how research has facilitated changes in policies or practices in other federal agencies. AHRQ-sponsored workshops, presentations, and technical assistance that address use of AHRQ tools generate a great deal of interest in products resulting from AHRQ investments. The following exemplify this:

- ◆ AHRQ conducted a 1.5-hour methods workshop on HCUP data at the AHSRHP conference. Despite being held as one of the last sessions, there were over 55 participants and there was heightened interest in the data.
- ◆ At another session AHSRHP, AHRQ's staff did a presentation on the use of HCUP data and the Quality Indicators for the National Quality Report.
- ◆ In addition, staff participated in two sessions at the Child Health Services Research conference, doing a presentation on the use of HCUP data and tools for research on children's hospitalizations, and moderating a session on state data for child health services research.

AHRQ-supported research was the information source for several government agencies. The following demonstrate how diverse these agencies are:

- ◆ CBO – received information on trends in mental health hospitalizations from 1990-1997. These data are useful to work they are doing on parity in coverage of mental health services (based on NIS data).
- ◆ The National Quality Forum – received information on the most common reasons for hospitalization by race for 7 HCUP SID states.
- ◆ ASPE – received information on quality of care for Medicare patients.

Quality Measures

6th Indicator: Achievable Benchmarks of Care are used for quality improvement activities by Peer Review Organizations.

Results: A new CAHPS RFA was released in May, 2001 that will include the development of a module for use in quality improvement activities.

7th Indicator: Use of dental performance measures by dental service and insurance organizations.

Results: Draft instruments for Nursing Home CAHPS, Dental CAHPS, ECHO are currently undergoing testing. In addition, AHRQ has obtained expert input into the development of a CAHPS module for persons with mobility impairments.

8th Indicator: HCUP quality indicators incorporated into efforts by hospital associations and hospitals to improve the quality of care.

Results: Quality indicators from AHRQ-funded research, used to assess health care quality, are increasingly an integral part of providers' efforts toward improving the level health care quality in the nation. For example, the Healthcare Association of New York State (HANYS) provides feedback to hospitals using the HCUP Quality Indicators and has described a number of examples of how hospitals have changed internal practices or have entered into collaborations with surrounding communities to improve the quality of care:

- ◆ One New York hospital reported that a hospital-wide intervention to prevent venous thrombosis was initiated in response to higher than average rates of post-surgical venous thrombosis reported through the HCUP QIs.
- ◆ A group of hospitals worked with primary care providers in the community to improve the outpatient treatment of diabetes because the rates of admission for diabetes complications measured using the HCUP QIs were higher than for other communities.
- ◆ Another group of hospitals worked with the state chapter of the College of Obstetricians and Gynecologists to reduce high rates of low birth weight identified using the HCUP QIs by fostering appropriate prenatal care in the surrounding community.

National Guideline Clearinghouse

9th Indicator: At least 10 users of the National Guideline Clearinghouse will use NGC site to inform clinical care decisions.

Results: The following are examples from the June 2001 NGC Second Annual Customer Satisfaction Survey of physician comments about how they use the NGC to inform clinical care:

- I can find appropriate choice of therapies for the patient I am taking care of.
- It is help in my clinical practice.
- This is a way to keep updated.
- I use it to search for guidelines for treatment and diagnosis to formulate the best approach for [my patients].
- Advice for decision making in daily routine.
- An excellent scientific source for my practice.
- Answering clinical questions.
- Apply evidence-based medicine in clinical practice.
- As a handy source for clinical question resolution.
- [I use the NGC] as a pediatrician doing patient care and an administrator developing a system for EBM at point of care.
- I am an academic Physician (Endocrinologist) and I need a rapid access to all kinds of Medical information pertinent to Internal Medicine and Endo/Metabolism. I recently discovered the NGC site, which, I believe, is the most “cost/effective” site available in Internet for a rapid, comprehensive review of the state of art about Medical Guide.

10th Indicator: Guideline development or quality improvement efforts by users will be facilitated through use of NGC in at least 5 cases.

Results: The following are examples from the June 2001 NGC Second Annual Customer Satisfaction Survey of physician comments about how they use the NGC for guideline development or quality improvement efforts:

- As a critical care anesthesiologist in charge of a department I found it very helpful to base our protocols on solid ground.
- As Chief of the Medical Staff at a military hospital, I use the guidelines to help standardize rational approaches to health care and treatment for the physicians that work in my facility.
- Assistance in developing new local guidelines
- Development of guidelines for a pediatric care network
- Develop a strategic plan for my hospital re methods of standardization of clinical care
- Developing clinical guidelines for my group practice
- Developing critical paths in my hospital
- Developing guidelines for a managed care organizations
- Developing guidelines for our community health center?s use

- Developing physician quality assessment based on compliance with guidelines

11th Indicator: NGC information will be used to inform health policy decisions in at least 2 cases.

Results: The following are examples from the June 2001 NGC Second Annual Customer Satisfaction Survey of Hospital/Health Administrator, Purchaser/Employer, and Policymaker comments about how NGC has been used to inform health policy decision:

- As a resource for policy formation at my health care facility.
- In the development of medical policies and clinical guidelines.
- Review of national guidelines for medical policy development.
- Coverage decision, clinical policy and guideline development.
- Reviewing it for reference in our Health Alaskans 2010 planning documents.

12th Indicator: Improvements in clinical care will result from utilization of NGC information in at least 3 cases.

Results: The following physician comments about improvements in clinical care resulting from use of the NGC are excerpted from the June 2001 NGC Second Annual Customer Satisfaction Survey:

- [I use the NGC because] I want to improve my clinical practice level
- [I use it to search] for guidelines for treatment and diagnosis to formulate the best approach for [my patients]
- As Chief of the Medical Staff at a military hospital, I use the guidelines to help standardize rational approaches to health care and treatment for the physicians that work in my facility.

Training Programs

13th Indicator: Two thirds of former pre- and postdoctoral institutional award trainees are active in the conduct or administration of health services research.

Results: A comprehensive evaluation of career paths and productivity of former pre- and postdoctoral trainees supported on institutional training grants was undertaken. Data indicate that former trainees are employed and actively involved in the conduct or administration of health services research. Results have demonstrated that 2/3 of pre-doctoral students are actively engaged in health services research activities (the majority of the remaining 1/3 have not yet completed their training). Over 90% of postdoctoral trainees supported by AHRQ are employed in research-related positions. The majority of former trainees are primarily in academia, though with an increased number opting for careers in nonacademic settings. Overall, three quarters continue to publish in academic journals since completion of their training, 1/3 have published books or chapters in books, and approximately 1/4 have published technical reports. Over 50% were investigators on grants or contracts related to health services research projects, a rate which escalates to 2/3 among former postdoctoral trainees.

In the spirit of continuous quality improvement, AHRQ also queried former trainees on their training experiences. Satisfaction rates were captured across multiple dimensions ranging from program content, to mentoring, to career relevancy. All were extremely high (over 90% were satisfied). Feedback provided by former students served as a basis for the development and refinement of career development programs sponsored by AHRQ. A conference on curriculum development was convened, at which a variety of educational institutions exchanged approaches to and innovations in preparing pre as well as postdoctoral students for careers in health services research. Attention was paid to the formation of public/private partnerships, responsiveness to community interests, and training in cultural competency. In addition, AHRQ embarked on programs designed to foster the research career development of newly minted researchers in order to prepare them to compete successfully with established researchers for support. Effort was also placed on building and extending a community of health services researchers across current training programs, as well as in states which do not traditionally receive significant HSR funding and institutions which traditionally serve minority students.

Patient Safety

14th Indicator: Fund the establishment of a patient safety program evaluation center that shall develop and implement an overall evaluation plan for patient safety projects funded by AHRQ.

Results: A task order has been issued to establish an implementation plan for a patient safety program evaluation center. Proposals were due by 8/30/2001 and are currently under review.

Objective 4.2: Evaluate the impact of MEPS data and associated products on policymaking and research products.

1st Indicator: Use of MEPS data in AHRQ research applications will increase by 10 percent over number received in baseline period of 2000.

Results: The number of grant applications submitted to AHRQ that proposed the use of MEPS data decreased from 4.7% in 2000, to 2.5% in 2001. Out of a total of 715 grant applications submitted to AHRQ in 2001, 18 required the use of MEPS data. 3 of these applications were funded. This decrease may have been due to AHRQ targeting the funding of grants in 2001 on research areas that are not supported by MEPS data, such as patient and worker safety. To improve access to technical assistance CCFS conducted 12 user workshops and answered 920 technical assistance questions. Approximately 100 users were added to the MEPS LIST SERVE increasing the subscriber number to 400. CCFS staff also staffed the AHRQ booth at professional meetings to answer MEPS related questions.

2nd Indicator: Feedback from MEPS workshop participants indicating that the workshops were useful and timely.

Results: In 2001 CCFS conducted 12 MEPS user workshops. 95 percent of participants completing workshop evaluations said that the workshop met their primary goal for attending the workshop.

3rd Indicator: At least 5 examples of how research using MEPS has been used to inform decisions by Federal, state and private sector policymakers.

Results: In 2001 CCFS published 47 journal articles in peer reviewed journals, 3 Chart Books, 1 Methodology Report, 2 Research Findings Reports, and 1 Highlight publication. (see attachments). All of these publications provide valuable input into health care policy formulation. In 2001 CCFS staff also made more than 100 MEPS related presentations at professional meetings or for health related organizations. The following examples highlight the use of MEPS data for policy decision:

- The staff of Representative Istook (Oklahoma) requested a tabulation of the top health conditions ranked according to condition specific health expenditures.
- In June, during the Congressional debates on the patients Bill of Rights, AHRQ received several inquiries about MEPS-IC health insurance data, including requests from Senator Kennedy's office and from the Heritage Foundations. A follow-up call to Senator Kennedy's office confirmed that they found the information on our web site to be informative and useful. According to Ralph Rector of the Heritage Foundation "When it comes to health insurance premium information, the MEPS-IC is the only game in town."
- Two States, Wisconsin and Arkansas purchased additional sample in the MEPS-IC this year to improve the MEPS-IC estimates for their states. This is related to work we have been doing for 20 States that are studying ways to expand health insurance coverage for low income children, workers, and families by coordinating public subsidies with private (employment-based) coverage, both under SCHIP and potentially more broadly. Over the past 6 months, we have provided special data tabulations to representatives from these States that provides additional information from the MEPS-IC survey to help them understand the structure of employment-based coverage in their States.
- AHRQ staffers prepared a literature review entitled "Does Spending on Prescription Drugs Reduce Spending on Other Health Care Services? A Preliminary Literature Review." This literature review, which was used as the basis for briefing staff in the Office of the Secretary, DHHS in April 2001. Featured among the papers reviewed was a recent study on this topic using MEPS data by researchers at Columbia University.
- AHRQ responded to a request from the Council of Economic Advisors for information on non-group premiums from the 1996 MEPS. The Council was provided with estimates by age group and single and family policies for the non-elderly population. The Council was also interested in more information on the type of policies purchased in the nongroup market, specifically whether these were high deductible plans. For those policies with linked MEPS HIPA data, AHRQ was able to show that many of the nongroup plans purchased in 1996 were high deductible policies. AHRQ also provided 1996

MEPS HC-IC estimates of private, non-group health insurance premiums by age group in response to requests from the Treasury, CBO, ASPE (to be included in a memo to the Assistant Secretary for Policy and Evaluation).

- AHRQ staff presented a paper on children’s insurance at the National Academy of Sciences’ “Workshop on Enhancing Methods for the State Children’s Health Insurance Program” in June. The paper is meant to help states understand issues underlying the design of public health insurance programs for low-income children.
- MEPS data were used to formulate Recommendations in the Institute of Medicine Report – Crossing the Quality Chasm: A new Health System for the 21st Century.
- MEPS data were used to formulate recommendations in the Institute of Medicine publication on the National Quality Report.

GPRA Goal 4 – FY 2002 Indicators

Goal 4 Objectives	FY 2002 Indicator
<p>Objective 4.1 Evaluate the impact of AHRQ sponsored products in advancing methods to measure and improve health care.</p>	<p>Fund evaluation of the impact of the CERTS program in disseminating information regarding therapeutics to at least 3 health care providers or others in order to improve practice.</p> <p>As a pilot approach to program evaluation, report on a citation analysis of results of one major research initiative to assess productivity and potential impact.</p> <p>Fund evaluation of private sector use of AHRQ findings to identify at least 5 private sector uses of AHRQ findings, and describe any assessment of the impact on clinical practice and/or patient care.</p> <p>Fund evaluation of the number and types of patient safety events reported to system grantees.</p> <p>Fund the interim evaluation of the extent to which patient safety best practices, identified in July 2001 EPC report, have been adopted by health care institutions.</p> <p>Report on the evaluation of HCUPnet and the HCUP Central Distributor and implement appropriate changes to each based on evaluation results.</p> <p>Fund evaluation of how AHRQ funded and conducted research on low-income populations is used by policymakers.</p>

	<p>Initiate evaluation of the effects of AHRQ's investment in Practice-Based Research Networks.</p> <p>Evidence-based Practice Centers Use of evidence reports and technology assessments to create quality improvement tools in at least 10 organizations.</p> <p>Findings from at least 3 evidence reports or technology assessments will affect State or Federal health policy decisions.</p> <p>Use of evidence reports or technology assessments or access to NGC site informed organizational decision making in at least 4 cases and resulted in changes in health care processes, quality, or health outcomes.</p> <p>Patient Safety User's panel (with composition similar to that of September 2000 patient safety research summit) will evaluate progress on patient safety research agenda defined by September 2000 summit. Evaluation criterion will be progress made in at least 50% of the research priorities as a result of the Agency's FY01 RFAs.</p> <p>Training Programs Establish continuous quality improvement systems for conducting process and outcome evaluations of new training and career development initiatives to help to ensure they are responsive to emerging needs and demands of the health care delivery system.</p>
<p>Objective 4.2: Evaluate the impact of MEPS data and associated products on policymaking and research products.</p>	<p>Have a fully functional MEPS-based MEDSIM model to allow simulation of the potential impact of programmatic changes in health care financing and delivery Dec 2002.</p> <p>Produce baseline FY statistics on number of MEPS-based articles published in peer review journals.</p> <p>Conduct customer satisfaction survey for MEPS workshop participants to assess how MEPS data is being used to inform research and public policy.</p> <p>Develop marketing plan to promote the MEPS-IC data to state officials Dec 2002.</p> <p>Increase by 15% over FY01 baseline the number of examples of how research using MEPS has informed decisions by Federal, state and private sector policymakers.</p>

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<p>GPRA GOAL 5: Support of initiative to improve health care Quality through leadership and research. (HCQO)</p>
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Strategy: Quality Interagency Coordination Task Force (QuIC)

The President mandated the establishment of the Quality Interagency Coordination Task Force (QuIC) as a vehicle for promoting collaboration among the Federal Agencies with health care responsibilities to improve the quality of care in America. The Secretaries of Health and Human Services and of Labor co-lead this activity and the AHRQ Director serves as operating chair. The QuIC is working to improve patient and consumer information, quality measurement systems, the workforce’s ability to deliver high quality care, and the information systems needed to support the analysis of the care provided. Input gathered through these coordinated activities contributes significantly to the development of quality-related research conducted and sponsored by AHRQ.

Types of Indicator: Process and output.

Use of Results by AHRQ:

The QuIC provides AHRQ with opportunities to further two major Agency goals. (1) In working with the Federal agencies that provide and/or purchase health care for millions of Americans, AHRQ is learning what major users of health services research on quality, evidence-based medicine and other topics need. This provides AHRQ with an invaluable source of real-time user input and directly influences the Agency’s research agenda and product development. (2) The QuIC provides AHRQ with unparalleled opportunities to advance its *Translating Research Into Practice* agenda. The Agency is able to inform the Federal health care community about the existence of research and products that currently are in the portfolio and are relevant to the issues the community is wrestling with.

Data Issues:

The results for these indicators are largely completed work products and success in meeting project milestones. As the Director of AHRQ is the QuIC operational chair the AHRQ Coordinator for Quality Activities is assigned to monitor progress of the various workgroups and maintains to all the pertinent data. The majority of the work products of the group are available upon completion to the public. In February 2000, the QuIC website became operational at www.QuIC.gov.

GPRA Goal 5 –FY 2001 Results

Objective 5.1: Conduct research to help to measure the current status health of care quality in the Nation.

1st Indicator: QI Taxonomy meeting held under the auspices of the QuIC.

Results: A taxonomy is being published in a peer-reviewed journal in cooperation With CMS on quality improvement efforts

2nd Indicator: Number of grants and contracts funded in FY2001 that will help to fill gaps in the information available to assess the national quality of care, or will help to expand the use of current measures to provide a broader or richer picture of quality.

Objective 5.2: Facilitate use of quality information to improve health care in the Nation.

1st Indicator: Number of grants to improve patient safety.

Results: A complete list of grants designed to improve patient safety can be found in the appendices of this document. The following provides a summary of the types and number of grants approved for funding in FY 2001:

- ◆ Funded 17 DCERPS
- ◆ Funded 3 Centers of Excellence in Patient Safety Research
- ◆ Funded 16 event reporting demonstrations
- ◆ Funded 6 cooperative agreements to provide dissemination and education in patient safety.
- ◆ Funded a coordinating center to assist in the dissemination of research results and best practices.

2nd Indicator: Adoption of Agency sponsored research and tools developed by one or more users to facilitate consumers/purchaser/decision-maker use of information about quality.

Results: CDC is now using NIS data (from HCUP) instead of NHDS data. Two articles are to be published in the Nov. 2001 issue of IMWR based on NIS data. In addition, an AHRQ grantee, a researcher at Dartmouth, is working for CMS (formerly HCFA) on the proportion of procedures performed for Medicare patients compared with all other patients. The researcher is studying the volume-outcome relationship in the Medicare population for a number of procedures. This is the initial information AHRQ will be providing as part of an investigation into whether CMS should publicly report information on hospital volume.

Objective 5.3: Improve quality measurement.

1st Indicator: Identification of collaborators for research projects on electronic medical records integrated with guidelines (e.g., from the Guideline Clearinghouse) or QI indicators (e.g., CONQUEST, QI Taxonomy project, HCUP measures).

Results: AHRQ has extended its collaborative partnerships throughout the country. The agency has been very successful in its efforts to collaborate on projects related to integrating guidelines from funded research with electronic medical records. The following grants that address implementation of guidelines, quality improvement indicators, or performance measures through the use of electronic medical records have been awarded by AHRQ:

Brigham & Women's Hospital (U18 HS11046)	Improving Quality with Outpatient Decision Support
Baylor College of Medicine (P20 HS11187)	Baylor Practice-Based Research Network
Children's Hospital Boston, Ma. (R01 HS09390)	Family Linkages Supporting Hyperbilirubin Guidelines
Duke University Med. Center (R01 HS09436)	Interactive, Guideline-Based Decision Support on the Web
Indiana University (P20 HS11226)	An Inner-City Primary Care Research Network
Medical University of South Carolina (U18 HS11132)	Primary and Secondary Prevention of CHD and Stroke
University of Pittsburgh (R01 HS09421)	Depression Care Using Computerized Decision Support

2nd Indicator: Adoption of Living With Illness children's health measure by NCQA.

Results: In FY2001, NCQA adopted a measure found in the CAHPS 2.0 related to living with illness for children's health. In addition, AHRQ has worked with accrediting bodies to:

- Establish a process for reviewing new surveys proposed for inclusion in the set of CAHPS surveys.
- Maintain an AHRQ representation on key external bodies including the NCQA Committee on Performance Measurement, JCAHO Board of Commissioners and Performance Measure Advisory Committee, the Consortium (formerly known as AMAP), and the National Quality Forum research subcommittee.

GPRA Goal 5 – FY 2002 Indicators

Goal 5 Objectives	FY 2002 Indicator
Objective 5.1: Conduct research to help to measure the current status of health care quality in the Nation.	Sponsor and conduct research to help measure the overall safety culture within health care institutions. Identify at least one private sector data source which will be incorporated into the national quality report by 31 December 2002.
Objective 5.2: Facilitate use of quality information to improve health care in the Nation.	Fund or conduct at least 3 projects bringing healthcare information to the public in an understandable, user friendly manner that facilitates its use in decision making.
Objective 5.3: Improve quality measurement.	Adoption of at least one quality measure to be developed from our vulnerable populations RFA by a national accrediting organization. Identify 3 examples of how the Quality Indicators were utilized by the public.

2.2 Budget Line (2) -- Medical Expenditure Panel Surveys (MEPS)

Funding Levels:	FY 2001	\$40,850,000 (Actual – Current Law)
	FY 2001	\$40,850,000 (Actual – Proposed Law)
	FY 2002	\$48,500,000 (Appropriation)
	FY 2002	\$48,500,000 (Current Estimate)
	FY 2003	\$53,300,000 (Request – Current Law)
	FY 2003	\$53,300,000 (Request – Proposed Law)

This budget line reflects AHRQ funding for the data collection and related activities conducted through the Medical Expenditure Panel Surveys.

GPRA Goal 6: Produce and release information from MEPS on health care access, cost, use, and quality.

Strategy: AHRQ's Medical Expenditure Panel Surveys collects detailed information regarding the use and payment for health care services from a nationally representative sample of Americans. No other surveys supported by the Federal Government or the private sector provide this level of detail regarding: the health care services used by Americans at the household level and their associated expenditures (for families and individuals); the cost, scope, and breadth of private health insurance coverage held by and available to the U.S. population; and the specific services that are purchased through out-of-pocket and/or third-party payments.

This level of detail enables public and private-sector economic models to develop national and regional estimates of the impact of changes in financing, coverage, and reimbursement policy and estimates of who benefits and who bears the cost of a change in policy. No other survey provides the foundation for estimating the impact of changes on different economic groups or special populations of interest, such as the poor, elderly, veterans, the uninsured, or racial/ethnic groups.

AHRQ will continue to assess the essential components of the MEPS program – development of new, updated, or otherwise enhanced databases; creation of products for use by researchers and policymakers outside AHRQ; and facilitation of the use of MEPS-related products.

Types of Indicators: Process and output
(Data collection begins with the treatment of common clinical conditions over time for a nationally representative portion of the population in support of the National Healthcare Quality Report.)

Use of Results by AHRQ:

The results provide the Agency with a thorough review of AHRQ's data collection and development activities and release of data products and publications associated with MEPS database. AHRQ uses the results for the management of the program.

Data Issues:

Many of these indicators are yes/no indicators where the data collection or product release happened as scheduled, or didn't. The evidence of successful completion of the indicators will be available on the AHRQ web site, where products can be accessed. Other data will come from contract monitoring files. Where deadlines have been missed, the Agency determined the cause for the delays and is making the necessary corrections. Beginning with the FY 2000 performance report, AHRQ will continue to include the results of evaluations of the use of the MEPS products in Section 4.2.

GPRA Goal 6 –FY 2001 Results

Objective 6.1: Release and disseminate MEPS data and information products in timely manner for use by researchers, policy makers, purchasers, and plans.

1st Indicator: In FY2001, 1997 Use and Expenditures, 2000 Point-in-Time, and 1998 Health Insurance and Demographics MEPS public use data files will be released.

Results: The following data files were released according to schedule:

- 1997 Use and expenditures were released in May 2001
- 1998 Health Insurance and Demographics were released in June 2001
- 2000 Point-in-time was released in July 2001
- 1996/97 longitudinal file was released in July 2001

2nd Indicator: Response time for requests received for information, assistance or specific products is as promised 95 percent of time.

Results: AHRQ continues to maintain a rapid response time to requests for MEPS data, with 95 percent of all technical assistance responded to within 5 working days.

Objective 6.2: Facilitate use of MEPS data and associated products as tools by extramural researchers, policy makers, purchasers, and plans.

1st Indicator: Establish baseline for Data Center use capacity.

Results: Between January and July 2001, 13 data center projects were approved. Applications are approved on a quarterly basis with the next review cycle being held in October 2001.

Objective 6.3: Modify MEPS to support annual reporting on quality, health care disparities, and research on long-term care in adults and children with special needs.

Quality

1st Indicator: Data collection begins on the treatment of common clinical conditions over time for a nationally representative portion of the population in support of the National Healthcare Quality Report.

Results: Beginning in February 2001, questions were added to the MEPS on priority conditions, accountability measures, and preventive care. An Adult self-administered questionnaire (SAQ), parent-administered questionnaire (PAQ), and Diabetes Care Supplement were administered to collect health status, satisfaction, and attitude information. These data will be used in concert with the point-in-time file to populate tables to be included in the National Quality Report.

The IOM has completed a recommended conceptual framework for the National Quality Report. AHRQ issued a call for measures to federal agencies to populate the framework and proposed measures have been received. An interagency workgroup is evaluating the proposed measures using criteria suggested by the IOM. A recommended set of measures for the first report is scheduled to be available for vetting in the Department and with external stakeholders in early Dec, 2001.

LTC:

2nd Indicator: Have developed data use agreements (DUA) with CMS to assess and begin data development related to the MDS.

Results: The LTC enhancements in MEPS for 2001 were not funded. However, AHRQ did modify the SSS data processing contract to procure the statistical support necessary to start work on developing an over sampling strategy for adults with functional limitations and children with special needs. A Data Use Agreement (DUA) has been drafted and accepted by HCFA/CMS for use of Minimum Data Set (MDS) data. An initial set of data has been delivered covering 6 states (CA, OH, NY, TX, WA, AL) representing 1,085,720 people who had at least 1 MDS assessment during July 1999 to July 2000.

An analysis dataset is being created from this raw data to assess the overall MDS data quality. The results of this analysis will help frame a future agreement with HCFA/CMS regarding full access for all 50 states. These data are being considered for use as quality indicators in the institutional population in the AHRQ National Quality Report.

The data were received in late November, 2000. Social and Scientific Systems, Inc., data processing contractors, started processing them in late March, 2001. Preliminary data processing tasks have been happening since then and construction of the analysis dataset was initiated in July 2001. Initial analysis of the data was completed by Fall, 2001.

3rd Indicator: Design MEPS over sample of adults with functional limitations and children with special needs.

Results: The LTC enhancements in MEPS for 2001 were not funded as a result, this MEPS enhancement did not occur as planned.

4th Indicator: Produce one report related to LTC.

Results: The final report of the Expert meeting in community-based Long- Term Care is in its final stages of preparation. It has been sent for review internally and is expected to be finalized by September, 2001. This expert meeting was a gathering of researchers who identified gaps in knowledge and research priorities in the area of community-based long-term care. The report will be a summary of the meeting and will highlight some recommendations. It is intended to become an AHRQ publication.

5th Indicator: Have developed IAA with NCHS for LTC frame development activities.

Results: The LTC enhancements in MEPS for 2001 were not funded as a result, this MEPS enhancement did not occur as planned.

6th Indicator: Submit at least one peer-reviewed publication in the area of LTC.

Results: The following article appeared in a peer-reviewed publication:

- ◆ Rhoades, J. A., and Altman, B.M. Personal Characteristics and Contextual Factors Associated with Residential Expenditures for Individuals with Mental Retardation. *American Association on Mental Retardation*, 2001;39(2):114-29.

GPRA Goal 6 – FY 2002 Indicators

Goal 6 Objective	FY 2002 Indicator
<p>Objective 6.1: Release and disseminate MEPS data and information products in timely manner for use by researchers, policy makers, purchasers, and plans.</p>	<p>Develop a method to facilitate users' custom cross tabulations of MEPS data.</p> <p>Conduct six MEPS data user workshops.</p> <p>Expand MEPS list-server participation by 20%.</p> <p>Produce 4 descriptive data products (ie findings, chartbooks, highlights, or table compendia).</p> <p>Develop Frequently Asked Questions Section for MEPS web site.</p>
<p>Objective 6.2: Facilitate use of MEPS data and associated products as tools by extramural researchers, policy makers, purchasers, and plans.</p>	<p>Determine the feasibility of existing mechanisms to provide off-site access to confidential MEPS data.</p> <p>Expand data center capacity by 10% over FY 01 level.</p>

Summary of Performance Objectives

2.3 Budget line 3 – Program Support

Funding Level:	FY 2001	\$2,500,000 (Actual – Current Law)
	FY 2001	\$2,587,000 (Actual – Proposed Law)
	FY 2002	\$2,600,000 (Appropriation)
	FY 2002	\$2,688,000 (Current Estimate)
	FY 2003	\$2,700,000 (Request – Current Law)
	FY 2003	\$2,789,000 (Request – Proposed)

GPRA Goal 7: Support the overall direction and management of AHRQ

This goal involves supporting the overall direction and management of AHRQ through prudent acquisition performance management, capital asset planning, personnel support and information technology planning.

Types of Indicators: Outcome indicators that document customer satisfaction with two major functions within the Agency are used.

Use of Results by AHRQ:

The scores for each of the measures, in combination with the written comments received in the survey, continue to be used to improve the acquisition systems and the Intranet.

Data Issues:

The data collection is accomplished through customer surveys administered to Agency staff annually.

GPRA Goal 7 –FY 2001 Results

Objective 7.4: Establish and maintain a secure Agency computer network infrastructure.

1st Indicator: Preliminary policies and procedures to reduce security risks developed by the end of FY 2001.

Results: AHRQ published a final IT Security Plan on November 5, 2001. AHRQ further refined the security plan and published version 1.1 on December 27, 2001.

2nd Indicator: Initial criteria for reporting security incidents established by the end of FY 2001.

Results: AHRQ published an Incident Response Plan documenting criteria for reporting security incidents on November 6, 2001. The Response Plan works in conjunction with security procedures detailed in the Agency IT Security Plan issued on December 27, 2001.

3rd Indicator: Initial procedures for responding to security incidents established by the end of FY 2001.

Results: AHRQ published an Incident Response Plan documenting initial procedures for responding to security incidents on November 6, 2001

4th Indicator: Implementation of a Secure Phase 1 LAN for analysis of intramural research and survey data will be completed by end of FY01.

Results: AHRQ has completed the implementation of Phase I of the Secure LAN. Intramural research and survey data housed at AHRQ has been evaluated based on NIST criteria and now resides on the Secure LAN. This LAN is an air-gapped network which is protected by various security measures which include, but are not limited to: media-less workstations, Proximity Devices, Secure Printing Facility, Video Monitoring Equipment, and Fiber from the desktop to the Secure LAN Cabinets.

5th Indicator: Implementation of a Phase 1 firewall, intrusion detection and virus control system will be in place by Dec 2001.

Results: AHRQ has completed the implementation of a Phase I firewall, intrusion detection and virus control system. The following features are operational:

- ◆ Two Raptor Firewalls V6.5, one primary and one secondary, were installed and are currently in the Phase 2 hardening stage. An independent validation and verification of high-level security measures revealed "no glaring issues at this time."
- ◆ Two servers running Real Secure's Intrusion Detection System, Internet Security System (ISS) V5.5, have been implemented and are monitoring the internal AHRQ network traffic and the external traffic attempting to come through AHRQ's firewall.
- ◆ Various virus-control systems have been implemented. The agency desktops are running McAfee's Virus Scan V4.0.3. The Exchange Server is running Trend Micro's Scan Mail 3.5.1, which scans both incoming and outgoing mail. McAfee's Netshield V4.1 is run against the file servers.

6th Indicator: Initial security awareness training will begin by Dec 2001.

Results: AHRQ implemented web-based IT Security Awareness Training on December 28, 2001.

GPRA Goal 7 – FY 2002 Indicators

Goal 7 Objective	FY 2002 Indicator
<p>02 Objective 7.4. Establish and maintain a secure Agency computer network infrastructure.</p>	<p>Perform initial tests, (periodically, beginning in 2nd quarter of FY 2002) to evaluate the preliminary policies and procedures.</p>
<p>02-03 Objective 7.5. Optimize work processes through implementation of AHRQ's workforce restructuring plan.</p> <p>(This measure will be initiated in FY02.)</p>	<p>Completed reports of findings and recommendations of at least one business process re-engineering studies.</p> <p>AHRQ passes all items on GISRA self-assessment checklist</p>

DEPARTMENT
OF HEALTH
AND HUMAN
SERVICES

Agency for Health Care Research and Quality

FISCAL YEAR **2003** PERFORMANCE PLAN

BUDGET AND PROGRAM AGGREGATION:

The AHRQ GPRA annual performance report and plans are aligned with the Agency’s three budget lines:

- (1) Research on Health Care Costs, Quality, and Outcomes,
- (2) Medical Panel Expenditure Surveys, and
- (3) Program Support.

The first two budget lines are where Agency programs are funded. The goals associated with each of the budget lines represent core activities funded in each. The following two tables illustrate how the GPRA goals are aligned with the AHRQ budget lines.

Beginning in FY 2003, AHRQ has redesigned our strategic management system and revised our GPRA goals to align more closely with the Agencies strategic plan. Table 2 shows this revision and realignment and pages 16 and 17 provide the FY2001-2002 framework along with the FY2003 framework.

Table 2: FY 2003 GPRA Framework

What the Indicators Address	GPRA Goal
Budget line 1: Research on Health Care Costs, Quality, and Outcomes	
Strategic Goal 1: Support Improvements in Health outcomes	To have measurable improvement in the type of delivery system or processes by which care is provided and their effects on health care outcomes.
Strategic Goal 2: Strengthen Quality Measurement and Improvement	To have measurable improvement in the quality and safety of healthcare for Americans.
Strategic Goal 3: Identify Strategies to Improve Access, Foster Appropriate Use and Reduce Unnecessary Expenditures	To develop the evidence base for policy makers and health systems to use in making decisions about what services to pay for, how to structure those services, and how those services are accessed.
Budget line 2: Medical Panel Expenditure Surveys	
Core MEPS activities	To provide comprehensive, relevant and timely data on health care use and expenditures for use by public and private sector decision makers and researchers.

Budget line 3: Program Support	
Enhance the value of AHRQ as the leader in Healthcare Outcomes, Quality, Cost, Use and Access research	Maximize the value of AHRQ by developing efficient and responsive business processes, aligning human capital policies and practices with AHRQ's mission, building an integrated and reliable information technology infrastructure

We believe that this realignment will not only help us determine how well the basic knowledge which forms the core of AHRQ's work provides information which can be turned into actions by those who make clinical decisions, purchasers and providers who make decisions about what services to use, pay for and how to structure those services, as well as by policy makers but will allow us, in time to answer the question, "What difference has AHRQ sponsored research made?"

2.1 Research on Health Care Costs, Quality and Outcomes

Funding Levels:	FY 2001	\$226,385,000 (Actual – Current Law)
	FY 2001	\$227,897,000 (Actual – Proposed Law)
	FY 2002	\$247,645,000 (Appropriation)
	FY 2002	\$249,171,000 (Current Estimate)
	FY 2003	\$194,000,000 (Request – Current Law)
	FY 2003	\$195,611,000 (Request – Proposed Law)

2.1.1 Performance Goal: To have measurable improvement in the type of delivery system or processes by which care is provided and their effects on health care outcomes.

Program Description and Context

At its most basic level, providing high quality health care is doing the right thing, at the right time, in the right way, for the right person. The challenge that health care providers and health systems managers face everyday is knowing what the right thing is, when the time is right, and what the right way is. Patients and their families are also faced with making choices about treatments and care settings with little information on the relative quality, risks and benefits available to them.

One of the most important priorities of AHRQ is to translate and disseminate the findings of research supported by the Agency into tools and information that can be used by its customers to make good health care decisions and to improve the outcomes of care. The research supported by AHRQ has historically concentrated on conditions that are common, costly, and for which there is substantial variation in practice. This research includes many of the conditions that represent major expenditures for Medicare and Medicaid. AHRQ's research attempts to reduce inappropriate variation and provide our health care decision maker with information on what care is appropriate, which clinical services work best in what circumstances and for which patients, how much is enough, and what resources are used to provide it. Outcomes research also attempts to help

decision makers understand the implications of structural and financing changes in the health care system on the outcomes of care delivered in the system.

Outcomes and effectiveness research seeks to understand the end results of particular health care practices and interventions. Outcomes include effects that people experience and care about, such as change in the ability to function. In particular, for individuals with chronic conditions—where cure is not always possible—end results include quality of life as well as mortality. By linking the care people get to the outcomes they experience, outcomes research has become the key to developing better ways to monitor and improve the quality of care. Supporting improvements in health outcomes is a strategic goal of the Agency for Healthcare Research and Quality.

Strategies to Improve Health Outcomes:

At the requested level, AHRQ's programs will assist with Secretarial Initiatives, particularly in the area of chronic illness, such as diabetes and asthma. Comprehensive primary care services can reduce the morbidity associated with these illnesses. Hospital admission rates for "ambulatory care sensitive conditions" serve as a marker for both impaired access to primary care and suboptimal quality of primary care delivered. Disparities in admission rates for racial and ethnic minorities and low-income populations have been well documented.

Programs that support AHRQ's efforts to improve the outcomes include: Centers for Education and Research on Therapeutics (CERTS), Evidence-based Practice Centers (EPCs), U.S. Preventive Services Task Force (USPTF); National Guidelines Clearinghouse (NGC) and Patient Outcomes Research Teams (PORTs).

Centers for Education and Research on Therapeutics (CERTS):

The CERTS program is a national initiative designed to increase the awareness of the benefits and risks of new, existing, or combined uses of therapeutics through education and research. The CERT's program grew out of recognition that physicians need more information about the therapies they prescribe. Although information is available through the pharmaceutical industry, continuing medical education programs, professional organizations, and peer reviewed literature, comparative information about the risks and benefits of new and older agents and about drug interactions is limited.

The research conducted by the CERT's program contributes to improving the health of Americans by increasing awareness of both the uses and risks of new drugs and drug combinations, biological products, and devices as well as of mechanisms to improve their safe and effective use; providing clinical information to patients and consumers; health care providers; pharmacists, pharmacy benefit managers, and purchasers; health maintenance organizations and health care delivery systems; insurers; and government agencies; and improving quality while reducing the cost of care by increasing the appropriate use of pharmaceuticals and biological products and devices and by preventing their adverse effects and the consequences of these effects (such as unnecessary hospitalizations).

Evidence-based Practice Centers (EPC's):

As the lead Federal agency for enhancing the quality, appropriateness, and effectiveness of healthcare services and access to such services, AHRQ conducts and funds research that develops and presents evidence-based information on healthcare outcomes, quality, cost, use and access. Included in AHRQ's legislative mandate is support of syntheses and widespread dissemination of scientific evidence, including dissemination of methods or systems for rating the strength of scientific evidence. These research findings and syntheses assist providers, clinicians, payers, patients, and policymakers in making evidence-based decisions regarding the quality and effectiveness of health care.

As a part of its charge to improve the quality and effectiveness of health care through the development of state-of-the-art health care information, and to respond to significant changes within the health care industry, AHRQ established 12 Evidence-based Practice Centers in 1997. AHRQ has become a science partner with private and public-sector organizations in their efforts to improve the quality, effectiveness and appropriateness of clinical practice. Since 1997, the EPC's have conducted more than 80 systematic reviews and analyses of scientific literature on a wide spectrum of topics, incorporating the results and conclusions into evidence reports and technology assessments.

The EPC program contributes to AHRQ's goal of improving the health of the American public by producing synthesis of clinical research findings through systematic methods for searching, reviewing, and evaluating the clinical literature. Evidence reports and technology assessments can be used by systems of care, professional societies, health plans, public and private purchasers, States, and other entities as the scientific foundation for development and implementation of their own clinical practice guidelines, clinical pathways, review criteria, performance measures, and other clinical quality improvement tools, as well as for formulation of evidence-based policies related to specific health care technologies.

U.S. Preventive Services Task Force (USPSTF):

Premature deaths and disabilities due to preventable causes continue to exact a large toll in the United States. Health care providers and health care organizations play an essential role in national prevention efforts, by delivering effective vaccines, screening patients for early disease or risk factors, counseling about health lifestyles, and prescribing preventive medications. Despite steady progress in the delivery of effective preventive care, important gaps remain – as of 1998, more than one third of women over 50 had not had a mammogram and breast exam in the last 2 years to screen for breast cancer, and more than a third of older adults had not received a flu shot that year. Inequities in preventive care also contribute to the disparities in the health of specific populations, such as racial and ethnic minorities, the elderly, and the poor and disabled.

The U.S. Preventive Services Task Force (USPSTF) and Put Prevention Into Practice (PIIP), two major programs at AHRQ, make significant contributions to the Department of Health and Human Services prevention activities. The U.S. Preventive Services Task Force, first convened in 1984, is charged with systematically reviewing the evidence of

the effectiveness of a wide range of clinical preventive services, including screening tests, counseling, immunizations, and chemoprophylaxis. The Put Prevention Into Practice program then works to translate information from USPSTF reports into a format that meets the needs of a wide variety of patients, clinicians, health plans, and health care purchasers.

National Guideline Clearinghouse (NGC):

The National Guideline Clearinghouse is a publicly available, web-based database of evidence-based clinical practice guidelines and related documents. Updated weekly with new content, the NGC is a partnership between AHRQ, the American Medical Association (AMA) and the American Association of Health Plans (AAHP) Foundation.

In its two years of operation, the NGC has become a resource for physicians, nurses and other health care professionals as well as purchasers and policy makers. Individual physicians and other clinicians can review and use the NGC in clinical decision making and patient counseling; health care organizations and integrated delivery systems can use information accessible through the NGC to adopt or adapt guidelines for their networks; medical specialty and professional societies can use NGC resources in their own guideline development efforts; employers and other large purchasers can use information from the NGC to assist them in making health care benefits purchasing decisions; educational institutions can incorporate information accessible through the NGC into their curricula and continuing education activities; and State and local governments can use the NGC in their quality assurance and program oversight efforts.

Patient Outcomes Research Teams (PORT's)

Beginning in 1989, the AHRQ (formerly the Agency for Health Care Policy and Research) funded a set of ambitious research projects known as patient outcomes research teams (PORTs). These 14 projects were succeeded, starting in 1993, by a "second generation" of projects known as PORT-II. Together, AHRQ's PORTs and PORT-IIs represent a total investment of more than \$100 million to answer critical questions about the effectiveness and cost-effectiveness of available treatments for common clinical conditions. A recent article by researchers from several PORTs, as well as Carolyn M. Clancy, M.D., Director of AHRQ's Center for Outcomes and Effectiveness Research, describes the purpose and accomplishments of the PORTs.

The PORTs were designed to take advantage of readily available data and to focus on common clinical conditions that are costly to the Medicare and Medicaid programs and for which there is regional variability in outcomes and use of resources. The PORTs are made up of a multidisciplinary team of researchers ranging from health economists and clinicians to quality-of-life experts and epidemiologists. PORT investigators were instructed to answer the following questions: What works and at what cost? For which patients or subgroups of patients? When? Why is there variation in the use of treatments? What can be done to reduce inappropriate variation? From whose perspective—i.e., the patient is the ultimate judge of effectiveness? Is there a potential for development and use of patient-reported outcome measures?

PORT researchers advanced the methods and applications of outcomes and effectiveness research, that is, the examination of the end results of medical interventions when applied to patients in everyday practice. Effectiveness studies often

are designed to monitor patients over time, wherever they get their care, and to chart the outcomes of that care. PORT researchers use Medicare and Medicaid data and data from insurance claims and other large administrative databases to characterize patterns of care, develop general and disease-specific outcome measures, and disseminate important outcome information to patients and physicians to reduce inappropriate practice variation and improve outcomes.

FY2003 OUTCOME MEASURES FOR MEASURING IMPROVEMENTS IN HEALTH OUTCOMES:

The three outcome measures selected represent common problems encountered in primary care and allow monitoring for children (asthma), the elderly (pneumonia and influenza), and high-risk infants (respiratory distress syndrome). For each condition there is evidence that interventions can reduce hospitalization rates. These conditions were chosen because reduction of morbidity can be obtained by coordination of community preventive services, public health interventions, clinical preventive services and primary care.

Interventions that improve access to and quality of care in population groups at high risk for avoidable hospitalizations and coordination of these efforts with community-based public health activities have the potential to reduce the disparities identified here. The national goal of a 25% reduction in avoidable hospitalizations for these conditions can be achieved through targeting these high-risk populations. The objective is to reduce the need for admission, and therefore the morbidity and costs associated with hospitalization, through improved primary care and preventive services.

Key Outcomes Improving Health Outcomes FY 03
<ul style="list-style-type: none">◆ Reduce by 5% the hospitalization rates for pediatric asthma◆ Reduce by 5% the immunization-preventable pneumonia or influenza in patients 65 and older.◆ Decrease by 5% the number of premature babies who develop Respiratory Distress Syndrome (RDS).

Program Outputs needed to achieve expected results:

At the budget level proposed in the President's Budget, AHRQ will maintain funding for Translating Research into Practice grants and contracts. At this level, expiring grants are not continued and the dollar amount reduction will be spread across non-patient safety and training grants.

- Maintain the number of synthesis reports generated on research findings and practical applications on Agency priority topics at FY 2001 levels.
- Report on impact of 5 uses of AHRQ-sponsored evidence reports, systematic evidence reviews, technology assessments, and the National

Guideline Clearinghouse for which Federal or other government agencies, professional associations, or other private healthcare organizations are measuring or assessing the impact on clinical practice and/or patient outcomes.

- Improve the evidence available to Federal and other direct care providers, professional associations, and other healthcare organizations to increase evidence-based practice and enhance health outcomes and quality.

AHRQ will use the following indicators to report success in this area:

- Using data found in HCUP, track the number of premature infants who develop RDS
- Using data found in HCUP, track the number of patients 65 and older hospitalized for immunization-preventable pneumonia or influenza
- Using data found in HCUP, track the number of children hospitalized for complications related to pediatric asthma
- Track the number of research findings that have been translated into practice
- Track the use of evidence by increasing the more effective partnerships with those who nominate topics for the EPCs, etc)

2.1.2 Performance Goal 2: To have measurable improvement in the quality and safety of healthcare for Americans

2.1.2.1: Measuring Improvements in Quality Program Description and Context

The United States has many of the world's finest health care professionals, academic health centers, and other research institutions. Patients sometimes receive excessive services that undermine the quality of care and needlessly increase costs. At other times, they do not receive the services that have proven to be effective at improving health outcomes and even reducing costs.

A recent Institute of Medicine (IOM) report states "Quality problems are everywhere, affecting many patients. Between the health care we have and the care we could have lies not just a gap but a chasm." In this report, the IOM proposes 13 recommendations to build a stronger healthcare system over the next decade.

One of AHRQ's strategic goals is to strengthen the quality of healthcare measurement and track improvements in the care available to Americans. To achieve this goal AHRQ has invested in the development and testing of measures of quality, as well as studies of the best ways to collect, compare and communicate these data, and identifying and widely disseminating effective strategies to improve quality of care. To facilitate the use of this information in the health care system, the Agency focuses on research that determines the most effective ways to improve health care quality, including promoting the use of information on quality through a variety of strategies, such as information dissemination and assessing the impact of health care organization and financing.

Meeting the needs of consumers, practitioners, and policymakers will depend in part on the availability of valid and useable measures of the quality of care. AHRQ will translate the findings from health services research, effectiveness studies, technology assessments, and clinical practice guidelines into quality of care measures and methods for everyday settings. Basic research will develop more refined measures and improvement strategies. Applied research and development will test the validity and reliability of the measurement instruments and facilitate their use in different population subgroups (such as minority groups, chronically ill, disabled, elderly, and children) and care settings. Demonstration projects will assess the use of measures and tools in performance management systems and quality improvement activities.

Strategies to Improve the Quality of Health Care:

The National Quality Report:

The Agency's reauthorization calls for the development of a national report on the quality of healthcare in the U.S. In developing this report, the Agency is called on by the legislation to expand the Medical Expenditure Panel Surveys (MEPS) to collect information on quality. In addition, the Agency is charged with assuring coordination with the private sector in the development of the report. In its report on AHRQ's reauthorization, the Senate Health Education Labor and Pension Committee provided the following guidance:

“Beginning in FY 2003, the Secretary, acting through the Director, is to submit an annual report on national trends in health care quality, drawing upon the enhanced MEPS survey and other available data. The Committee expects the Agency to use a variety of measures to develop this annual picture of how health care quality is faring. The legislation directs the Agency to take into account any outcomes measurements generally collected by private sector accreditation organizations to assure that the reported information is not inconsistent with what is being collected through other programs. The committee hopes that this annual report will provide an opportunity for quality performance comparisons.”

The Agency's coordination of the development of a National Healthcare Quality Report is also responsive to the President's Quality Commission report, which concluded, “The lack of comprehensive information on the quality of American health care is unacceptable.” Finally, the recent Institute of Medicine's Commission on medical errors called for a national report on progress on that issue. These mandates envision a report that goes beyond a compilation of available data and statistics to provide a framework for those public and private entities with an interest in improving the quality and safety of patient care.

HCUP Quality Indicators:

Health care decision makers need user-friendly data and tools to help them assess the effects of health care program and policy changes, accurately measure outcomes, community access to care, utilization and cost of care as well as to guide future health care policy making.

To meet this need, AHRQ has developed a set of Quality Indicators (QIs), which use hospital administrative data to highlight potential quality concerns, identify areas that need further study and investigation, and track changes over time. These indicators represent a refinement and further development of the Quality Indicators developed in the early 1990's as part of the Healthcare Cost and Utilization Project (HCUP).

The AHRQ QIs are a set of quality indicators that have been organized into three modules: Prevention, Inpatient and Patient Safety QIs.

Using these modules in FY2003, hospital and hospital systems can use AHRQ QIs to help answer questions such as:

- o How does our hospital's cesarean section rate compare to the State or Nation?
- o Do other hospitals have similar mortality rates following hip replacement?
- o How does the volume of coronary artery bypass graft in my hospital compare with other hospitals?

State data organizations and community health partnerships can use AHRQ QIs to ask questions that provide initial feedback about clinical areas appropriate for further, more in-depth analysis, such as:

- o What can the pediatric AHRQ QIs tell us about the adequacy of pediatric primary care in our community?
- o How does the hysterectomy rate in our area compare with the State and national average?

State hospital associations can use the AHRQ QIs to do quick hospital quality and primary care access screens. Other potential users include managed care organizations, business-health coalitions, state data organizations, and others poised to begin assessments using hospital discharge data to answer questions such as:

- o Can we design community interventions in areas surrounding hospitals that have higher rates of diabetes complications?
- o Which Quality Indicators can be incorporated into performance management initiatives for our member hospitals?

Finally, Federal policymakers can use the AHRQ QIs to track health care quality in the United States over time and to assess whether health care quality is improving, for example:

- o How does the rate of coronary artery bypass grafts vary over time and across regions of the United States?
- o What is the national average for bilateral cardiac catheterization (a procedure generally not recommended) and how has this changed over time?

Translating Research Into Practice (TRIP)

Translating research findings into sustainable improvements in clinical outcomes and patients' outcomes remains a substantial obstacle to improving the quality of health care in America. What has been learned in the research setting is often not incorporated into daily clinical practice. To address this gap, in September 2000 AHRQ funded 13 new projects to evaluate different strategies for translating research findings into clinical practice. The aim of these 3-year cooperative agreements is to identify sustainable and reproducible strategies to:

- o Help accelerate the impact of health services research on direct patient care
- o Improve the outcomes, quality, effectiveness, efficiency, and/or cost effectiveness of care through partnerships between health care organizations and researchers.

These new projects join 14 others funded in 1999 as part of a major initiative by AHRQ to close the gap between knowledge and practice-between what we know and what we do-to ensure continuing improvements in the quality of the Nation's health care.

The 14 studies supported in the initial phase of the TRIP initiative address a variety of health care problems, primarily through randomized controlled trials. These studies, which represent important prototypes of what is possible under ideal circumstances, generally require an elaborate strategy for superimposing data collection on the demands of routine practice.

The second phase of this initiative, TRIP-II is aimed at applying and assessing strategies and methods that were developed idealized practice settings or that are in current use but have not been evaluated. Furthermore, increased demands for accountability in health care, including reporting of clinical performance using standardized quality measures, have created a sense of urgency regarding improvement within health care organizations. With this as a basis, TRIP-II focuses on implementation techniques and factors-such as organizational and clinical characteristics- associated with successfully translating research findings into diverse applied settings, including AHRQ sponsored Practice Base Research Networks (PBRNs).

Consumer Assessment of Health Plans (CAHPS®)

Consumer Assessment of Health Plans makes available consumers' ratings of the quality of care and services they get from their health plans. This information is used by other consumers to make informed choices among health plans, by health care purchasers – such as employers or Medicaid programs – to select plans to offer their employees or beneficiaries, and by plans for quality monitoring and improvement. CAHPS® already has been used by more than 20 states, 10 employer groups and a wide range of health plans and companies. For example, CAHPS® was adopted by the Office of Personnel Management for use by the Federal Employees Health Benefits Program to survey Federal employees and report the findings to help about 9 million Federal Employees choose health plans during the federal open season. CAHPS® also merged with the HEDIS (Health Plan Employer Data and Information Set) Member Satisfaction Survey and will be used by the National Committee for Quality Assurance to

evaluate and accredit managed care plans for 40 million Americans. Finally, the Centers for Medicare and Medicaid Services (CMS) has used a specially developed version of CAHPS® to survey over 130,000 Medicare enrollees in managed care plans. The results of this survey, which was released in February 1999, was available to help CMS's 39 million beneficiaries who will be selecting a health plan.

These, and other successful uses of CAHPS®, is a testament to the importance of sustained basic and applied health services research in producing practical information for everyday health decision making.

FY2003 OUTCOME MEASURES FOR MEASURING IMPROVEMENT IN THE QUALITY OF HEALTHCARE:

Key Outcomes - Improving the Quality of Health Care
FY '03

- ◆ Produce the First Annual National Quality Report
- ◆ Develop a CAHPS® module for consumer assessments of health and services received in nursing homes
- ◆ Develop CAHPS® assessment instruments for people with mobility impairments

Program Outputs needed to achieve expected results:

At the budget level requested in the FY 2003 President's Budget, AHRQ will be able to maintain grant and contract commitments which address translating research into practice, MEPS, HCUP, CAHPS and patient safety. Reductions will be made to grants and contracts in other areas.

- o Maintain the number of projects being funded that bring healthcare quality information to the public in an understandable, user-friendly manner that facilitates its use in decision-making. Baseline: FY2001
- o Identify private sector data to be used in future National Quality Reports
- o Identify a core set of quality measures to be used to report on progress in improving the overall quality of health care.

Indicators AHRQ will use to measure success in this area over the next two fiscal years:

- o Track improvements in the quality of care as measured by a core set of measures that have been proven to be reliable and valid.
- o Track how the public utilizes quality measures

2.1.2.B Program Description and Context: Measuring Improvements in Patient Safety:

Patient safety is a top priority in the nation today. It is estimated that up to 98,000 Americans die each year as a result of preventable medical errors (Kohn 1999). The majority of these errors are a result of systemic problems rather than poor performance by individual providers. Although the United States provides some of the best health care in the world, there are a significant number of patients that are being harmed as a result of the process of health care.

In Fiscal year 2001, AHRQ re-named the Center for Quality Measurement and Improvement (CQMI) the Center for Quality Improvement and Patient Safety (CQuiPS). This was tangible evidence of AHRQ's efforts to re-focus activities to improve the quality of health care Americans receive, and address preventable patient errors by reducing the risk of patients being harmed by the process of health care.

The *goal of patient safety* is to reduce the risk of injury and harm from preventable medical errors. This goal can be accomplished by the removal or minimizing of hazards, which increase the risk of injury to patients. Three steps must be followed to ensure that the "epidemic" of medical errors is contained. These steps are:

- *Identify* the causes of preventable errors and the hazard that increase the risk of injury to patients
- *Implement* patient safety practices that eliminate known hazards and reduce the risk of injury to patients and create a positive safety culture.
- *Maintain Vigilance* to ensure that a safe environment continues and a positive safety cultures are maintained.

Key phrases are risk, adverse events, no-harm events, near miss, and detection.

Risk is the possibility/probability of occurrence or recurrence of an event multiplied by the severity of the event. *Hazard* is anything that can cause harm (NHS 2000). An event is a deviation in an activity or technology, which leads towards an unwanted, negative consequence. (Freitag and Hale 1997). Events can be classified in three different categories (Battles 2001).

An *adverse event/misadventure* is an occurrence during clinical care which results in physical or psychological injury or harm to a patient or harm to the mission of the organization. A *no-harm event* is an event that has occurred but resulted in no actual harm although the potential for harm may have been present. Lack of harm may be due to the robust nature of human physiology or pure luck. An example of such a no-harm event would be the issuing of an ABO incompatible unit of blood for a patient, but the unit was not transfused and was returned to the blood bank.

A *near miss* as defined by Van der Schaaf (1991) is an event in which the unwanted consequences were prevented because there was a recovery by identification and correction of the failure, either planned or unplanned. Heinrich (1941) developed the iceberg concept of accidents and errors. The part of the iceberg above the water represents events that cause major harm; below the water are no-harm events as well as near misses.



Strategies for Improving Patient Safety:

The overall goal of reducing medical errors and improving quality and patient safety is an overall HHS goal, which is shared among AHRQ, Food and Drug Administration (FDA), Center for Medicare and Medicaid Services (CMS), HRSA and Indian Health Service (IHS). AHRQ's research contribution focuses on creating basic knowledge and evaluating the strength of existing evidence which provides information that can be turned into actions by those who make clinical decisions, purchasers and providers who make decisions about what services to use, pay for and how to structure those services, as well as by public policy makers.

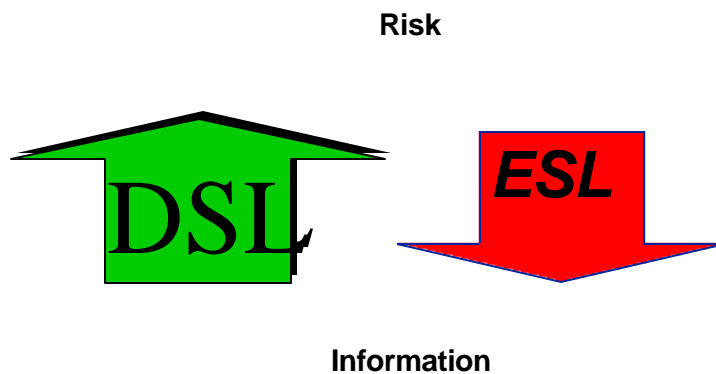
In cooperation with other DHHS partners AHRQ will seek to improve the quality healthcare and reduce medical errors by 1) accelerating the implementation of existing quality measures and safety practices 2) developing capacity and new practices for Quality and Safety Improvements and 3) detecting safety hazards and monitoring improvements in healthcare Safety and Quality.

The Agency believes the best way to approach improving patient safety is through an integrated set of activities to design and test best practices for reducing errors in multiple settings of care; develop the science base to inform these efforts, as well as to improve provider training in the reduction of errors; capitalize on the advances in information technology to translate proven effective strategies into widespread practice; and build the capacity to further reduce errors in the future. AHRQ's goal of improving the quality and safety of the healthcare that Americans receive cannot be achieved in a single year, but must follow a systematic progression of activities over a number of years. In addition, AHRQ's activities should not be viewed in isolation, but should be combined with similar efforts in other DHHS departments, to produce the desired improvements in quality and safety.

In FY 2003, activities will build on the progress made in FY '01 and '02 and activities directed at stage two of the medical error epidemic will be added to the portfolio, with a primary focus on minimizing the risk of preventable injuries.

Detecting safety hazards and monitoring improvement in Safety and Quality:

Detection is the first step in error management. From an organizational point of view it is important that error detection rate be high because errors that are not detected can have disastrous consequences (Zapf & Reason 1994). Thus one of the goals of error management is to increase detection and reporting rates to decrease risk of harm to patients. *Detection Sensitivity Level (DSL)* is the number of events reported to an organization. High reporting rates indicate a high DSL while few events reported indicates a low DSL. To achieve a high DSL an organization must eliminate impediments to reporting. *Event Severity Level (ESL)* is the level risk of the events reported. Over time the event severity level should go down as an indicator of successful error management while the detection sensitivity level (DSL) remains high (Kaplan 1998). DSL represents information while ESL represents risk.



Developing a system which will consistently and reliably identify potential hazards to patient safety will require developing a national system of patient safety reporting and monitoring. For example, existing data collection mechanisms, if properly coordinated and standardized, could provide a powerful national asset as an early warning system for patient safety hazards, providing pooled data for analysis to develop solutions to patient safety problems, and for tracking progress in patient safety.

In addition, a successful monitoring system will require a direct investment in IT infrastructure and enhancements to improve safety monitoring. Healthcare is well behind other industries in harnessing the potential of information technology. Developing the healthcare IT infrastructure is key to monitoring the improvements in patient safety. The development of options and information to support investments in IT infrastructure, including cooperative agreements to encourage IT investment and develop national models of IT infrastructure.

Finally, developing data standards and vocabulary to ensure that patient safety information can be pooled, analyzed, and used to identify hazards and safety practices will be essential. The lack of standardized coding and language could result in a healthcare information system "Tower of Babel". This initiative, in conjunction with the Department and sister agencies, will strive toward the development of patient safety information standards, development of voluntary consensus on those standards, and incorporation of those standards into existing Departmental databases.

Accelerate the implementation of existing patient safety practices:

In July 2001, the Agency released a report, entitled Making Health Care Safer: A Critical Analysis of Patient Safety Practices, which examined the evidence supporting 79 promising safety interventions. Many of these proven lifesaving interventions, such as the use of medications to reduce the risk of heart attacks and infections in surgical patients, are not consistently implemented.

Key to developing and implementing this strategy will be implementing local safety improvement priorities and improving the information available to the public on patient safety. Healthcare organizations and systems must be challenged to implement proven patient safety practices. Participating organizations and systems should be encouraged to develop their own practice implementation practices from those identified in the Agency's FY 2001 report and will be provided funding to facilitate the system's investment in implementing those practices. Finally, these organizations and systems will be required to generate information on the barriers faced in implementing the practices as well as measure the impact of the intervention on patient safety. Cooperative agreements will include a provision to make continued funding of the program contingent upon a demonstrated ability to implement the identified priorities and measure their impact.

In addition, to order to improve the information available to the public on patient safety the Agency will use its Consumer Assessment of Health Plans Survey (CAHPS) program, which is responsible for the development of state of the art survey and reporting instruments, to provide information about patient's experience of care; to improve the relevance of systems based information on patient safety for the public; support value-based purchasing initiatives; and develop mechanisms for public reporting on evidence-based safety interventions.

Developing Capacity and New Practices for Safety Improvement:

The Agency's July 2001 report on patient safety interventions identified a number of promising interventions for which more effectiveness evidence is required prior to general implementation. Many potential patient safety practices drawn primarily from non-medical fields, such as the use of simulators, bar coding, "swipe" technology, and crew resource management, require additional study to clarify their value in the health care environment. The success of this strategy will depend on the continuing development and evaluation of new safety interventions, improving local patient safety infrastructure and capacity, and developing reliable information for purchasers and the public to support wise decision-making.

FY2003 OUTCOME MEASURES FOR MEASURING IMPROVEMENT IN HEALTHCARE SAFETY:

AHRQ is committed to identifying ways of continually improving patient safety in an environment of high quality health care. Its investments sponsor research that helps to measure the overall safety culture within health care institutions. The agency's performance goals and measures will be used to gauge progress as advances are made toward increasing event reporting and reducing risk of harm.

Key Outcomes - Improving the Safety of Health Care FY '03

- o Nationally, 12 health facilities or regional initiatives will be funded to implement interventions and service models on patient safety improvements by 2004.
- o On-site patient safety experts in 10 states and technical assistance to improve patient safety by 2004

Program Outputs needed to achieve expected results:

At the budget level proposed in the President's Budget AHRQ will maintain funding for our Translating Research into Practice grants and contracts. At this level expiring grants are not continued and the dollar amount reduction will be spread across non-patient safety and training grants.

- o Invest \$3 million in new activities designed implement local safety improvements priorities by providing incentives to put systems-based interventions in place in healthcare organizations.
- o Invest \$2 million in new programs designed to provide technical assistance to states and provide on-site patient safety experts to improve local capacity.
- o Produce at least one synthesis of research findings and practical applications of AHRQ's research which will be available to clinical decision makers, health systems and policy makers
- o Report the interim data on the extent the patient safety best practices identified in the July 2001 EPC report have been adopted by health care institution
- o Identify the number and types of adverse events, no-harm events, and near miss events reported in demonstration projects (Baseline established)

Indicators AHRQ will use to measure success in this area:

- o Track the number and types of adverse events, no-harm events, and near miss events reported.
- o Track the number of patient safety interventions being put into practice.

External Factors influencing success: AHRQ's ability to meet its target goals is dependent upon complementary programs being implemented in CMS and OASPE.

2.1.3 Performance Goal 3: To develop the evidence base for policy makers and health systems to use in making decisions about what services to pay for, how to structure those services, and how those services are used and accessed.

Program Description and Context

2.1.3.1: Develop Strategies for Making Decisions

Adequate access to health care services continues to be a challenge for many Americans. This is particularly true for the poor, the uninsured, and members of minority groups, rural residents, and other priority populations. In addition, the changing organization and financing of care has raised new questions about access to a range of health services, including emergency and specialty care. At the same time, examples of inappropriate care, including over utilization and misuse of services, continue to be documented. Through ongoing development of nationally representative and more specialized databases, the production of public-use data products, and research and analyses conducted by AHRQ staff and outside researchers, the Agency addresses critical policy issues pertaining to the access, cost and use of health care.

Research related to the effects of payment and organizational structures and processes on the cost, quality and equity of health care services are essential components of this research initiative. Research results are intended to 1) improve clinical practice, 2) improve the health care system's ability to provide access to and deliver high quality, high-value health care, and 3) provide policymakers with the ability to assess the impact of payment and organizational changes on outcomes, quality, access, cost, and use of health care services.

Responding to the Institute of Medicine's (IOM) report, "Crossing the Quality Chasm," AHRQ will fund applications that provide rigorous, objective, and essential evidence required by public and private decision-makers seeking to understand and improve the health care system, to make changes in health care delivery, insurance, and financing, and to manage the system in a manner that would induce efficient, effective, equitable, accessible and timely health care.

Important issues to be addressed by such research include: 1) How do different payment methodologies and financial incentives within the health care system affect health care quality, costs, and access? a) How do payment methodologies affect the behavior of health care organizations and individual providers? b) Which payment arrangements among patients, providers, and health plans enhance patient-centered knowledge of and involvement with treatment regimens? c) How do payment policies affect decisions about the purchase and selection of health services and health insurance? What is the

role of quality in such decisions? What are the effects of such decisions on health care costs? 2) What has been the impact of purchaser and public sector initiatives on quality, costs, and access to health care and health insurance? Of particular interest would be the impact of employer and coalition efforts on the quality and cost-effectiveness of care in the marketplace, the impact of State efforts to monitor and improve access and quality, and the impact of public and private payment changes on access to health care and to health insurance for vulnerable populations. 3) What organizational structures and processes are most likely to sustain high-quality, efficient, effective, timely, and accessible health care? 4) How do different patterns and levels of market competition affect the quality and cost of care?

In addition, AHRQ will fund projects in basic methodological work to support such research, including: development of payment methodologies; improvements in analytical and empirical methods required to simultaneously address issues of efficiency, quality, and equity; and improvement in data collection methods and qualitative methods needed to understand the structure of new health care organizations and an evolving health care system.

Strategies to Improve Access, Foster Appropriate Use and Reduce Unnecessary Expenditures:

Excellence Centers to Eliminate Ethnic/Racial Disparities (EXCEED)

The health of Americans has improved over the past few decades, but not all Americans have benefited equally. Many ethnic and racial groups have not shared in the advances in health outcomes and health care. To understand the causes and factors of these inequalities, in September 2000, AHRQ awarded grants to nine Centers to conduct a series of related studies. Now known as “Excellence Centers to Eliminate Ethnic/Racial Disparities” (EXCEED), the grants bring together teams of both new and experienced investigators in a 5-year effort to analyze underlying causes and contributing factors for racial and ethnic disparities in health care and to identify and implement strategies for reducing and eliminating them. The Centers of Excellence approach enables assembly of a critical mass of investigators to address a group of projects linked by a central theme, such as communication or cultural competency. In addition, the Centers are able to train new investigators with an interest in minority health services research.

The EXCEED program joins a series of AHRQ initiatives aimed at improving the health and health care of priority populations and eliminating racial and ethnic disparities in health outcomes and in health care access and service delivery. AHRQ expects that lessons learned from understanding and eliminating racial and ethnic disparities in health and health care as well as the practical tools and strategies to eliminate these disparities would be generalizable beyond the communities studied. By focusing on the attributes of the ethnic and racial groups, the underlying etiologies for the disparities, and components and conditions of interventions to eliminate the disparities, these projects should produce findings that are widely applicable for minority as well as majority populations across the country.

Integrated Delivery System Research Networks (IDSRNs)

The Integrated Delivery System Research Networks (IDSRN) is a new model of field-based research that links the Nations top researchers with some of the largest health care systems to conduct research on cutting edge issues in health care on an accelerated timetable.

Designed by AHRQ, the IDSRN was developed explicitly to capitalize on the research capacity of, and research opportunities occurring within, integrated delivery systems. The network creates, supports, and disseminates scientific evidence about what works, and what does not work in terms of data and measurement systems and organizational “best practices” related to care delivery and research diffusion. It also provides a cadre of delivery-affiliated researchers and sites to test ways to adapt and apply existing knowledge.

As a group, the IDSRN provides health services in a wide variety of organizational care settings to over 34 million Americans, including the privately insured, Medicare and Medicaid patients, the uninsured, ethnic and racial minorities, and rural and inner-city residents. Moreover, each of the nine IDSRN partners have the following three unique attributes that make it particularly well suited for conducting time-sensitive research:

- o Available Data – each of the IDSRN partners collect and maintain administrative, claims, encounter and other data on large populations that are clinically, demographically and geographically diverse
- o Research Experience – IDSRN partners include some of the country’s leading health services researchers, with expertise in quantitative and qualitative methodologies as well as first hand knowledge of emerging issue areas which have critical policy or managerial implications
- o Management authority to implement health care interventions – IDSRN partners have responsibility for managing delivery systems and are in a position to implement financial and organizations strategies (e.g., selective contracting with physicians and hospitals for specific approaches to diffuse clinical guidelines within the system) with an evaluation component.

Primary Care Based Research Networks (PBRNs)

Over the past decade, primary care practice-based research networks (PBRNs) have emerged as a promising approach to the scientific study of primary care. A PBRN is a group of ambulatory practices devoted principally to the primary care of patients, affiliated with each other (and often with an academic or professional organization) in order to investigate questions related to community-based practice. Typically, PBRNs draw on the experience and insight of practicing clinicians to identify and frame research questions whose answers can improve the practice of primary care. By linking these questions with rigorous research methods, the PBRN can produce research findings that are immediately relevant to the clinician and, in theory, more easily assimilated into everyday practice. In addition, data is readily available which will provide useful information on who receives care, where and how often.

In September 2001, 18 of these networks were awarded continuation grants (cooperative agreements) to conduct network-defining surveys, using standardized instruments. The surveys will provide baseline data on the clinicians enrolled in each

network, the services provided, and the characteristics of patients receiving those services. Potential uses of the data include practice benchmarking and guiding the selection and design of specific PBRN research projects. Four of the networks were awarded additional funds to pilot test and evaluate electronic methods of collecting and aggregating practice-derived research data. Two networks were awarded additional funds to assess clinician and patient knowledge and attitudes about protecting the privacy and confidentiality of research data.

AHRQ's overall goal is to improve the capacity of PBRNs to expand the primary care knowledge base and to establish mechanisms that will assure that new knowledge is incorporated into actual practice and its impact is assessed. Additional information on PBRNs is available at: <http://www.ahrq.gov/research/pbrnfact.htm>

HIV Research Network

As HIV/AIDS spreads into different communities and as new therapies become available, policymakers require reliable information about the type and costs of the health care services that persons with HIV disease are receiving, so that informed resource-allocation decisions can be made. The HIV Cost and Services Utilization Study (HCSUS) is the first major research effort to collect information on a nationally representative sample of people in care for HIV infection. HCSUS is examining costs of care, utilization of a wide array of services, access to care, quality of care, quality of life, unmet needs for medical and nonmedical services, social support, satisfaction with medical care, and knowledge of HIV therapies.

HCSUS is composed of a core study and several supplemental studies. The core study has enrolled a national probability sample of 2,864 HIV-infected adults who were receiving ongoing or regular medical care in the first 2 months of 1996. Respondents were sampled from 28 urban areas and 24 clusters of rural counties in the continental United States. Patients receiving services in hospitals, clinics, and private practice settings were enrolled. HCSUS oversampled women and members of staff model health maintenance organizations, to obtain more precise information on these specific populations. Supplemental studies are examining HIV care delivery in rural areas, prevalence of mental and substance abuse disorders, oral health of HIV-positive individuals, and issues related to HIV-infected persons over 50 years of age.

HCSUS is funded through a cooperative agreement between the Agency for Health Care Policy Research (AHCPR) and RAND—a private nonprofit research institution in Santa Monica, CA. Supplemental funding has been provided by the [Health Resources and Services Administration](#) (HRSA), the [National Institute of Mental Health](#) (NIMH), the [National Institute of Aging](#) (NIA), the [National Institute of Drug Abuse](#) (NIDA), the [National Institute of Dental and Craniofacial Research \(NIDCR\)](#) (NIDR), and the [Office of Minority Health Research](#) (OMR). A consortium of private and Government institutions, centered at RAND, are conducting HCSUS. Local and national advisory groups have been established to facilitate communication between the HIV community and the research consortium.

In Fiscal Year 1999 and 2000, AHRQ and sister agencies (HRSA, SAMHSA, and the Office of AIDS Research at NIH) provided support to develop the first phase of the HIV Resource Utilization Data Coordinating Center (DCC). In Fiscal Year 2001, based on the

promising results of the first phase, support from these agencies has continued, and plans have been made to expand the scope of this project.

The goal of this project is to provide timely and relevant information to policymakers about the resources utilized to treat persons with HIV disease. It is important to obtain timely data because quickly occurring therapeutic advances, the shifting epidemiology of HIV infection, and the rapid diffusion of managed care are having a major effect on patterns of health care resource utilization for HIV disease. More than \$7 billion spent each year by Medicaid, Medicare, the Department of Veterans Affairs, and the Ryan White CARE Act to treat people with HIV disease. Information is needed by Federal and State policymakers to ensure that all persons with HIV disease have access to appropriate health care services.

The mechanism developed to address these issues is a multi-site HIV provider network, which is linked by a centralized data-coordinating center. The Data Coordinating Center (DCC) receives data from a large number of HIV providers around the nation in order to provide valid and reliable information about the determinants of resource utilization by persons with HIV disease. The Data Coordinating Center has the capability to receive, consolidate, analyze, and disseminate information about the care provided to persons with HIV disease, eventually operating in a continuous data receipt mode.

Healthcare Cost and Utilization Project (HCUP)

The unprecedented volume and pace of change in the U.S. health care system, and the fact that changes are not occurring uniformly across the country, require a new information paradigm in which scientifically sound, standardized databases and tools for using them are made available at the national, regional, and State levels.

The [Healthcare Cost and Utilization Project](#) (HCUP) is a Federal-State-industry partnership to build a standardized, multi-State health data system. HCUP is maintained by the Agency for Healthcare Research and Quality (AHRQ, formerly the Agency for Health Care Policy and Research). AHRQ has taken the lead in developing HCUP databases, Web-based products, and software tools and making them publicly available.

HCUP comprises a family of administrative longitudinal databases—including State-specific hospital-discharge databases and a national sample of discharges from community hospitals—and powerful, user-friendly software that can be used with both HCUP data and with other administrative databases.

HCUP databases fill a unique niche and are increasingly being tapped by analysts and researchers interested in hospital utilization, access, charges, quality, and outcomes. The data are used to:

- Describe patterns of care for uncommon as well as common diseases.
- Analyze hospital procedures.
- Study the care of population subgroups such as minorities, children, women, and the uninsured.

Researchers and policymakers use HCUP data to identify, track, analyze, and compare trends at the national, regional, and State levels.

FY2003 OUTCOME MEASURES FOR MEASURING HEALTHCARE COST, USE, AND ACCESS:

Key Outcomes – Cost, Use and Access
FY '03

- Increase the number partners contributing data to the HCUP databases by 5% above FY2000 baseline.

Program Outputs needed to achieve expected results:

At the budget level proposed in the President's Budget, AHRQ will maintain funding for Translating Research into Practice grants, HCUP grants and contracts, patient safety and MEPS. At this level, expiring grants are not continued and the dollar amount reduction will be spread across non-patients safety and training grants. At this level AHRQ will:

- o Maintain funding for grant and contract commitments supporting the Healthcare Cost and Utilization Project

Indicators AHRQ will use to measure success in this area:

- o The number of IDSRN finding used by health plans and others
- o The number of HCUP journal articles or policy tools which use HCUP data
- o The number of HIV research network findings being used by Network providers to improve the delivery of care

2.1.4 Performance Goal: Improving the Quality of Health Care Delivery through Research and Training:

Program Description and Context: Research and Training

Today's health environment continues to change rapidly. Consolidation of health plans, movement of patients and providers into managed care settings, efforts to contain rising health care costs, fears that cost containment measures will lower the quality of care, and persistent problems in access to care and health insurance coverage for many Americans are issues of great concern.

Public and private purchasers are experimenting with new, untested financing strategies, organizational arrangements, and delivery approaches. Health plans and providers are seeking to measure and improve the effectiveness and cost-effectiveness of the care they purchase or provide.

Decisionmakers at all levels in the health care system rely on this critical knowledge to inform effective choices. For example:

- Purchasers are looking for value, for high-quality care at a reasonable cost
- Patients and caregivers want to make informed decisions about preventive and other primary care services, treatments, providers, and health care plans.

- Clinicians need information to make the best possible decisions for and with their patients.
- Health plans need information to determine which services to cover.
- Institutional providers (hospitals, groups, and systems of care) need information to make decisions.
- Policymakers need to understand the ramifications of available policy options.

Health services research addresses these issues to provide information to help people make decisions at the clinical, system and policy levels. To ensure there are adequate numbers of highly qualified scholars to address emerging needs in delivery of high-quality health care, AHRQ continues its commitment to support the research education of future leaders in the field through research and institutional training programs. In order to achieve this goal, concerted attention is placed on nurturing the development of a strong, visible, and integrated cadre of health services researchers. Emphasis is given to supporting the education and career development of new investigators through a variety of individual and institutional grant programs. Combining didactic training with experiential research opportunities, these initiatives produce both a cadre of researchers and a body of research that address issues related to the cost and financing of health care, access to health care, quality and outcomes of health care, and the translation of clinical research into health care policy and practice geared toward the provision of effective, safe health care.

Strategies to Improve the Quality of Health Care Delivery through Research and Training:

National Research Service Awards (NRSAs):

AHRQ supports 24 U.S. academic institutions that offer advanced training to people with a strong interest in health services research who want to prepare for careers in the organization, provision and financing of health care services. These programs provide tuition support and stipends to highly qualified predoctoral and postdoctoral candidates. The goals of the research education programs are to help ensure that there will be enough well-trained health service researchers to improve quality, assure value for health dollars, and enhance access to services and to equip scholars with the necessary knowledge, skills and experience to conduct research that will meet the evolving needs of patients, providers, health care plans, purchasers, and/or policy-makers.

Dissertation Research Grants:

Dissertation research funding is available for students conducting doctoral-level research on some aspect of the health care system. These grant awards are often the first step toward establishing a career in health services research.

Career Development Awards

AHRQ began to support career development activities in FY 2000. These awards, provided to individuals embarking on a research career, allow individuals time and resources to gain experience in carrying out actual research. The intent is to provide transitional support for newly trained investigators in order to launch them on research

careers. This program will nurture the next generation of health services researchers. AHRQ supports two career development programs:

- Mentored Clinical Scientist Development Award (K08) in Health Services Research. This research award provides support for the development of outstanding clinician research scientists who are committed to a career in health services research, with a focus on development as an independent scientist.
- Independent Scientist Award (K02) in Health Services Research. The K02 provides support for newly independent investigators with a clinical or research doctoral degree to enable them to develop their research careers.

Minority Research Infrastructure Support Program (M-RISP)

The Agency is committed to the Department's Initiative to Eliminate Racial and Ethnic Disparities in Health and the complementary Healthy People 2010 Goal to eliminate disparities in health. A critical component in achieving these goals is to expand the nation's health workforce to be more diverse and representative of the racial and ethnic populations in America. This includes bringing needed diversity to the health services research workforce.

In FY 2001, AHRQ launched the Minority Research Infrastructure Support Program (M-RISP). The goals of the M-RISP program are to increase the number of minority health services researchers, and to build capacity for institutions to conduct health services research intended to improve health for racial and ethnic minorities.

Building Research Infrastructure & Capacity Program (BRIC)

In order to build research capacity in States that have not traditionally been involved in health service research, the Building Research Infrastructure & Capacity Program (BRIC), AHRQ has funded four two-year planning grants to pilot test the feasibility of developing a new program to broaden the geographic distribution of AHRQ funding and enhance the competitiveness for research funding of institutions located in States that have a low success rate for grant applications from AHRQ. These grants will stimulate sustainable improvements in capacity and/or multi-disciplinary centers supporting investigators and multiple research projects with a thematic focus.

FY2003 OUTCOME MEASURES FOR MEASURING HEALTHCARE RESEARCH AND TRAINING:

- Key Outcomes – Research and Training
FY '03
- o Increase the number of minority researchers trained as health services researchers.
 - o Build research capacity in states that have not traditionally been involved in health services research, by supporting the development of the needed infrastructure;
 - o Support training programs for junior-level researchers and mid-career scientists to emerging and innovative research methods – Establish Baseline number of programs
 - o Support training programs that build curricula and foster innovative training approaches.

Program Outputs needed to achieve expected results:

At the budget level requested in the FY 2003 Presidents Budget, AHRQ will be able to maintain only those grant and contract commitments which address translating research into practice, MEPS, HCUP, CAHPS and patient safety. Reductions will be made to ongoing grant and contract commitments in the research and training portfolio, however at the requested budget level AHRQ will:

- o Maintain NRSA grants at the level of the NIH set-aside
- o Reduce funding to current training programs. The exact amount and form the reductions take will be determined in FY 2002 and final outputs will be conveyed in the Agency's '03 Final Performance Plan.

2.2 Budget Line (2) -- Medical Expenditure Panel Surveys (MEPS)

Funding Levels:	FY 2001	\$40,850,000 (Actual – Current Law)
	FY 2001	\$40,850,000 (Actual – Proposed Law)
	FY 2002	\$48,500,000 (Appropriation)
	FY 2002	\$48,500,000 (Current Estimate)
	FY 2003	\$53,300,000 (Request – Current Law)
	FY 2003	\$53,300,000 (Request – Proposed Law)

2.2.1: Performance Goal: To provide comprehensive, relevant and timely data on health care use and expenditures for use by public and private sector decision makers and researchers.

2.2.1.1: Strengthen Core MEPS Activities

The Medical Expenditure Panel Survey (MEPS) is designed to continually provide policymakers, health care administrators, businesses, and others with timely,

comprehensive information about health care use and costs in the United States, and to improve the accuracy of their economic projections.

MEPS collects data on the specific health services that Americans use, how frequently they use them, the cost of these services and how they are paid for, as well as data on the cost, scope, and breadth of private health insurance held by and available to the U.S. population.

MEPS is unparalleled for the degree of detail in its data, as well as its ability to link data on health services spending and health insurance to the demographic, employment, economic, health status, and other characteristics of survey respondents. Moreover, MEPS is the only national survey that provides a foundation for estimating the impact of changes in sources of payment and insurance coverage on different economic groups or special populations of interest, such as the poor, elderly, families, veterans, the uninsured, and racial and ethnic minorities.

MEPS is designed to help understand how the dramatic growth of managed care, changes in private health insurance, and other dynamics of today's market-driven health care delivery system have affected, and are likely to affect, the kinds, amounts, and costs of health care that Americans use. MEPS also is necessary for projecting who benefits from, and who bears the cost of, changes to existing health policy and the creation of new policies.

AHRQ medical expenditure survey data have been used by:

- The Health Care Financing Administration and other components of the Department of Health and Human Services, the Congressional Budget Office, Office of Management and Budget, Department of the Treasury, Physician Payment Review Commission, Prospective Payment Assessment Commission, and other Federal Government agencies.
- The Heritage Foundation, Lewin-VHI, Urban Institute, RAND Corporation, Project Hope, and other foundations and "think-tanks."
- Health insurance companies, pharmaceutical firms, health care consultants, and other health-related businesses.
- Academic institutions and individual researchers.

MEPS provides answers to hundreds of questions, including:

- How health care use and spending vary among different sectors of the population, such as the elderly, veterans, children, disabled persons, minorities, the poor, and the uninsured.
- How the health insurance of households varies by demographics, employment status and characteristics, geographic locale, and other factors.

MEPS also answers key questions about private health insurance costs and coverage, such as how employers' costs vary by region. The answers to these and other MEPS questions enable Congress, the Federal Government's executive branch, and other public- and private sector policymakers to:

- Make timely national estimates of individual and family health care use and spending, private and public health insurance coverage, and the availability, costs, and scope of private health insurance among Americans.

- Evaluate the growing impact of managed care and of enrollment in different types of managed care plans.
- Examine the effects of changes in how chronic care and disability are managed and financed.
- Assess the impact of changes in employer-supported health insurance.
- Evaluate the impact of changes in Federal and State health care policies.
- Examine access to and the costs of health care for common diseases and conditions, prescription drug use, and other health care issues.

Strategies to Improve Information available to Decisionmakers:

Household Component (HC)

The HC collects data on approximately 10,000 families and 24,000 individuals across the Nation, drawn from a nationally representative subsample of households that participated in the prior year's NCHS National Health Interview Survey.

The objective is to produce annual estimates for a variety of measures of health status, health insurance coverage, health care use and expenditures, and sources of payment for health services. These data are particularly important because statisticians and researchers use them to generalize to people in the civilian noninstitutionalized population of the United States, as well as to conduct research in which the family is the unit of analysis.

The panel design of the survey, which features several rounds of interviewing covering 2 full calendar years, makes it possible to determine how changes in respondents' health status, income, employment, eligibility for public and private insurance coverage, use of services, and payment for care are related.

Because the data are comparable to those from earlier medical expenditure surveys, it is possible to analyze long-term trends. The information from the Household Component also permits analysts and policymakers to address the health care policy issues facing the Nation in the 21st century.

Medical Provider Component (MPC)

The MPC covers approximately 3,000 hospitals, nearly 17,000 physicians, and 500 home health care providers. Its purpose is to supplement information received from respondents to the MEPS HC. The MPC also collects additional information that can be used to estimate the expenses of people enrolled in health maintenance organizations and other types of managed care plans.

Insurance Component (IC)

The IC consists of two subcomponents, the household sample and the list sample. The household sample collects detailed information on the health insurance held by and offered to respondents to the MEPS HC. The number of employers and union officials interviewed varies from year to year, as the number of respondents in the previous year's HC varies. These data, when linked back to the original household respondent, allow for the analysis of individual behavior and choices made with respect to health care use and spending.

The list sample consists of a sample of approximately 40,000 business establishments and governments throughout the United States. From this survey, national, regional, and State-level estimates (for approximately 40 States each year) can be made of the amount, types, and costs of health insurance available to Americans through their workplace.

FY2003 OUTCOME MEASURES FOR MEDICAL EXPENDITURE PANEL SURVEY:

Key Outcomes – Medical Expenditure Panel Survey
FY '03

- Provide timely national estimates of health care use and expenditures, private and public health insurance coverage, and the availability, costs and scope of private health insurance benefits among the U.S. population.
- Analyze changes in behavior as a result of market forces or policy changes (and the interaction of both) on health care use, expenditures, and insurance coverage.
- Provide information on access to medical care, quality and satisfaction for the US population and for those with specific conditions, and for important subpopulations.
- Develop cost and savings estimates of proposed changes in policy.
- Identify the impact of changes in policy for key subgroups of the population (i.e., who benefits and who pays more).

Program Outputs needed to achieve expected results:

At the budget level requested in the FY 2003 Presidents Budget, AHRQ will:

- o Develop and maintain MEPS-NET
- o Conduct 8 MEPS user workshops.
- o Expand MEPS list-server participation by 20%.
- o Produce 8 Descriptive Data Products (i.e. findings, chartbooks, highlights, or table compendia).
- o Update frequently asked question section of MEPS Web site.
- o In concert with ULP, develop an IC module for a workshop to promote the use of MEPS-IC data to state policymakers.
- o Increase by 15% the number of MEPS-based articles published in peer reviewed journals relative to baseline year (FY02).
- o Determine the feasibility of existing mechanisms to provide off-site access to confidential MEPS data by conducting a review of arrangements other statistical agencies have implemented.
- o Expand data center capacity by 10% over FY 02 level.
- o Modify MEPS to support annual reporting on quality, health care disparities, and research on long-term care in adults and children with special needs.

Indicators AHRQ will use to measure success in this area:

- o The number of attendees at MEPS user workshops
- o The number of policy makers who use MEPS analysis in policy decisions
- o Satisfaction ratings of participants in MEPS workshops
- o Data Center usage

2.3 Budget line 3 – Program Support

Funding Level:	FY 2001	\$2,500,000 (Actual – Current Law)
	FY 2001	\$2,587,000 (Actual – Proposed Law)
	FY 2002	\$2,600,000 (Appropriation)
	FY 2002	\$2,688,000 (Current Estimate)
	FY 2003	\$2,700,000 (Request – Current Law)
	FY 2003	\$2,789,000 (Request – Proposed)

2.3.1: Performance Goal: Maximize the value of AHRQ by developing efficient and responsive business processes, strategic management of human capital by aligning human capital policies and practices with AHRQ’s mission, building an integrated and reliable information technology infrastructure

2.3.1.1: Enhance Efforts on Health Outcomes, Quality, Cost, Use and Access

In FY 2000, AHRQ conducted an Agency-wide workforce and workload analysis that identified major Agency work processes and functions, captured data on the competencies of the current workforce and estimated levels of future workforce capacities. In FY 2001, the Agency began following up on the 2000 Study in four areas: 1) a refinement and expansion of Agency work functions and activities that captures more detailed administrative and operational processes; 2) refinement of the staff competencies needed to perform the work of the Agency; 3) review of the Agency’s recruitment and selection activities and processes in order to make recommendations for improvement; 4) the development of a multi-year strategy to systematically address the Agency’s structure, technology and workforce related issues.

Strategies to Maximize the Value of AHRQ

Developing efficient and responsive business processes

The Agency’s five-year workforce restructuring plan, as approved by the Office of the Secretary, focuses on periodic analysis of the manner in which the Agency conducts its work and how well the existing structures, technology, and systems support this work.

- o Develop and implement a plan for identifying, obtaining, storing and using programmatic and operations management and performance data to help inform resource allocation decisions.
- o Prioritize established work processes and develop a plan to conduct business process reviews. These reviews will be designed to ensure that the following issues are addressed: Are there unnecessary managerial and organizational levels?; Is decision making authority appropriately delegated?; and Do managers have sufficient authority to carry out their responsibilities and manage their programs.
- o Initiate a business process review of the AHRQ grants process from conception of a grant announcement to tracking of publications coming from completed grants with the goal being to make this process more effective and efficient.

Strategic Management of Human Capital:

In FY 2000, AHRQ conducted an Agency-wide workforce analysis that identified major Agency work processes and functions, captured data on the competencies of the current workforce, and estimated future workforce requirements based on projected workload, retirement, and attrition trends. In FY 2001, the Agency is building on the outcomes of the 2000 Study by continuing to refine their workforce planning tools and conduct additional organizational assessments through four initiatives: 1) development of a more detailed model of the Agency's work that captures the administrative, operational, and programmatic functions and activities; 2) refinement of the core, technical, and leadership competencies needed to perform functions and activities outlined in the model of the Agency's work; 3) review of the Agency's recruitment and selection processes to include recommendations for improvements and; 4) development of a multi-year strategy designed to identify resources, tools, and information needed to meet the changing demands of their work, as well as streamline costs.

The first initiative in FY 2001 involved the development of a detailed model of AHRQ's functions and activities to outline AHRQ's current work. The agency will use this model as an assessment tool for such things as future workload analyses and assessment of gaps in work activities.

In the second initiative, the competencies identified in the Spring 2000 effort are currently being refined and validated to create competency models based on the more detailed functions and activities model. These models will assist the agency in recruiting, selection, training, development, and performance assessment activities.

The third initiative, the recruiting and selection process assessment, benchmarking, and recommendations task, resulted in four primary recommendations for improving AHRQ's processes for recruiting and selecting new employees. These recommendations are currently being evaluated for implementation.

Building an integrated and reliable information technology infrastructure

AHRQ is undertaking a comprehensive review of our business processes and products. This will undoubtedly result in changes in not only how we do our daily work, but also how information flows within the organization. Therefore, we must also redefine our information technology architecture so that not only do we meet requirements multiple statutory requirements, such as GISRA, Clinger-Cohen, but also to ensure that it meets the management and organizational needs of the agency. Evolving technologies, such as Web-based applications, provide opportunities for us to accomplish our work in new, more efficient and timely ways. The IT infrastructure we develop must be adaptable to meet new requirements and while maintaining information security and critical infrastructure protections.

FY2003 OUTCOME MEASURES FOR RESEARCH MANAGEMENT

Key Outcomes – Research Management

- BPR of grants process, complete with recommendations, will be complete by end of FY2003
- Succession plans for key Agency leadership roles will be in place by beginning of FY 04
- AHRQ recruitment and retention plan will be designed to fill gaps identified in the assessment of current Agency workforce competencies
- Conduct a review of AHRQ's FAIR Act Inventory
- Identify and evaluate existing and new technologies to support AHRQ's revised business processes.

Program Outputs to meet required goals:

- o Establish profile specific competency requirements for each of the agency's key leadership positions
- o Define diversity goals and identify sources to target recruiting efforts
- o Develop communication strategies for PSC HR and hiring managers that facilitates ongoing identification of staffing needs; consideration of training existing staff or hiring new staff to meet needs; identifying the most effective resources for recruiting the new hires and the timeframes required for obtaining new hires
- o Establish criteria to assess success of recruiting and selection efforts
- o Complete Business Process Review of AHRQ's grants process and design implementation plan for recommendations
- o Identify IT mission critical systems and services, measure current performance and establish systems to monitor ongoing system integrity

**DEPARTMENT
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Agency for Health Care Research and Quality

APPENDICES

A.1 Changes and Improvements Over Previous Year

Summary

The basic structure of the AHRQ FY 02 performance plan for FY 02 is unchanged. The titles for Goals Five and Six were revised to simplify the presentation, but the program objectives represented under each goal remain the same.

The indicators presented under each objective were updated to reflect where Agency programs are expected to be in FY 2003 and the anticipated level of funding. The update resulted in output and outcome measures being added, particularly in Goals Three and Four, for programs and research initiatives that are expected to come to fruition during that period. Additionally, the details of some indicators have changed based on results received in FY 2000.

Detailed Presentation of Goals and Objectives

(Indicators can be seen in detail in section 1.4 of this report.)

Goal 1: Establish Future Research Needs Based on User's Needs

01 Performance Objective	02	Comments
Objective 1.1: Define direction of FY project funding priorities, in large part, by needs assessment activities.	Same	

Goal 2: Make significant contributions to the effective functioning of the US health care system through *the creation of new knowledge*.

01 Performance Objective	02	Comments
Determine annually the salient findings from research in each of the three areas (outcomes; quality; and cost, access, and use) and develop plan for next steps translation and dissemination.	Same	

Objective 2.2: Achieve significant findings from AHRQ sponsored and conducted research.	Discontinued	This measure is combined with 3.1 in FY 2002.
Objective 2.3 Initiate FY Research Initiatives.	Same	

Goal 3: Foster translation of new knowledge into practice by developing and providing information, products, and tools on outcomes, quality, and access, cost, and use of care.

01Performance Objective	02	Comments
Objective 3.1: Maximize dissemination of information, tools, and products developed from research results for use in practice settings.	Achieve significant findings from AHRQ sponsored and conducted research and maximize dissemination of information, tools, and products developed from research results for use in practice settings.	This measure is combined with 2.2 in FY 2002. Measure 2.2 is discontinued in FY 2002.
Objective 3.2: Develop and facilitate the use of new tools, talent, products, and implementatio methodologies stemming from research portfolio.	Same	This is objective 3.3 in FY 99-00.
Objective 3.3: Develop and facilitate the use of new tools, talent, products, and implementation methodologies stemming from research portfolio.	DISCONTINUED	Objective 3.3 is discontinued in FY 01. (This becomes objective 3.2 in FY 01.)

Goal 4: Evaluate the effectiveness and impact of AHRQ research and associated activities.

01 Performance Objective	02	Comments
Objective 4.1: Evaluate the impact of AHRQ sponsored products in advancing methods to measure and improve health care.	Same	Objectives 4.1 and 4.2 have been consolidated in the FY 01 plan The FY 00 plan inadvertently had two objectives of the same title. That redundancy has been removed. With that exception, the objectives remain the same as FY00.
Objective 4.2: Evaluate the impact of MEPS data and associated products on policymaking and research products.	Same	

Goal 5: Support initiative to improve health care quality through leadership and research.

01 Performance Objective	02	Comments
Objective 5.1: Conduct research to help to measure the current status health of care quality in the Nation.	Same	
Objective 5.2: Facilitate use of quality information to improve health care in the Nation.	Same	
Objective 5.3: Improve quality measurement.	Same	

Goal 6: Medical Expenditure Panel Surveys

01 Performance Objective	02	Comments
Objective 6.1: Release and disseminate MEPS data and information products in timely manner for use by researchers, policy makers, purchasers, and plans.	Same	
Objective 6.2: Facilitate use of MEPS data and associated products as tools by extramural researchers, policy makers, purchasers, and plans.	Same	
Objective 6.3: Modify MEPS to support annual reporting on quality, health care disparities, and research on long-term care in adults and children with special needs.	Same	The name changed slightly to make the objective more generic from year to year. This objective is where the Agency will note the ongoing and important role that MEPS is playing in measuring national quality.

GOAL 7: Support the overall direction and management of AHRQ

Budget line: Program Support

01 Performance Objective	02	Comments
Objective 7.1 is mandatory (Capital Assets) but not applicable to AHRQ.	Discontinued	The measures for these objectives are for internal management and do not warrant being reported outside AHRQ. The measures for this area also remain in place internally in the Office of Management Operations Plan and employee performance plans for the managers and staff.

<p>Objective 7.2: Maintain acquisition performance management system to ensure: (1) timely completion of transactions, (2) vendor and customer satisfaction, and (3) efficient and effective use of resources.</p>	<p>Discontinued</p>	<p>The measures for these objectives are for internal management and do not warrant being reported outside AHRQ.</p> <p>The measures for this area also remain in place internally in the Office of Management Operations Plan and employee performance plans for the managers and staff.</p>
<p>Objective 7.3: continued enhancement and expansion of Agency intranet site to ensure staff have immediate access to all current information.</p>	<p>Discontinued</p>	<p>The measures for these objectives are for internal management and do not warrant being reported outside AHRQ.</p> <p>The measures for this area also remain in place internally in the Office of Management Operations Plan and employee performance plans for the managers and staff.</p>
<p>Objective 7.4: Establish and maintain a secure Agency computer network infrastructure.</p>	<p>Same</p>	<p>This objective was initiated in FY01.</p>
<p>Objective 7.5. Optimize work processes through implementation of AHRQ's workforce restructuring plan</p>	<p>.</p>	<p>This measure will be initiated in FY02.</p>

A.2 Linkage to HHS Strategic Plan - AHRQ is guided by and supports the strategic plan goals of the Department of Health and Human Services (HHS).

The Agency's activities contribute to five of the six HHS goals.

- HHS Goal 2:** Improve the Economic and Social Well-Being of Individuals, Families, and Communities in the United States – For example, through the Agency's research on children's health
- HHS Goal 3:** Improve Access to Health Services and Ensure the Integrity of the Nation's Health Entitlement and Safety Net Programs – For example, through the activities of the Agency's Center for Primary Care Research
- HHS Goal 4:** Improve the Quality of Health Care and Human Services – For example, through numerous Agency activities including quality measurement research and data development
- HHS Goal 5:** Improve the Nation's Public Health System – For example, through the Agency's data development and monitoring activities and investments
- HHS Goal 6:** Strengthen the Nation's Health Sciences Research Enterprise and Enhance Its Productivity – For example, through the Agency's research, data development, translation, and dissemination activities

A detailed summary of AHRQ's contributions to the HHS strategic plan follows, however, the Agency's contributions to Goals 4 and 6 are of particular note.

AHRQ is the Department's lead Agency for health care quality activities and is a major contributor to Goal 4. Research on the determinants of health care quality, effective and cost effective ways to improve health care quality, and how to measure health care quality will be instrumental in achieving success in the goal's objectives. Additionally, the new information developed, and then implemented in the health care system, from research on outcomes and effectiveness of care, as well as access to, cost, and use of health care, will help close the gaps between what we know and what we need to know, on the one hand, and what we know and what we do in health care, on the other hand. AHRQ also supports HHS Goal 4 through leadership of the Secretary's quality initiative, support of the Quality Interagency Task Force, contributions to the HHS Race and Health Disparities Initiative, and close working relationships with other HHS Agencies and the Office of the Secretary.

Within Goal 6, AHRQ's expanding portfolio in outcomes and effectiveness, quality, primary care, and other practice-based research, as well as extramural and intramural studies of issues pertaining to access, cost, organization, and delivery of health care, will contribute to achieving objective 6.4. Additionally, AHRQ's substantial investment in the development of databases will enable others to perform research and analyses to answer questions critical to understanding the dynamics of the health care system.

AHRQ maintains its commitment to building the infrastructure needed to continue to conduct high-quality, cutting-edge health care research for the next century through national training programs (including the National Research Service Awards program), service fellows and summer intern programs, mentoring programs, and the provision of technical assistance to a variety of its audiences. AHRQ will continue to support and expand efforts to attract trainees from racial and ethnic minorities into the field of health services research. These activities are aligned with Objective 6.6.

For the Nation's investment in research to reach its full potential, the results must be widely disseminated (Objective 6.7) and implemented. The AHRQ Cycle of Research presented in section E.2. of this plan illustrates the important role that dissemination will play in all areas of activity within the Agency. This focus aligns with Objective 6.7.

Examples of AHRQ's Contributions to the HHS Strategic Plan:

HHS Goal 2: Improve the Economic and Social Well-Being of Individuals, Families, and Communities in the United States

HHS Objective 2.5: Increase Opportunities for Seniors to Have an Active and Healthy Aging Experience

HHS Objective 2.6: Expand Access to Consumer-Directed, Home and Community-Based Long-Term Care and Health Services

AHRQ will conduct research in areas relevant to improving the aging experience in such areas as: 1) conditions of particular importance to the Medicaid population; and 2) quality measurement issues and tool development for institutional settings. In FY 2001, AHRQ has supported important new initiatives to improve the knowledge and tools to improve health care quality for Older Americans and optimize their functional outcomes.

HHS Goal 3: Improve Access to Health Services and Assure the Integrity of the Nation's Health Entitlement and Safety Net Programs

HHS Objective 3.2: Increase the Availability of Primary Health Care Services

To test the effectiveness of health care improvement approaches, AHRQ will study such topics as: 1) the implementation of evidence-based information in diverse health care settings to determine effective strategies for enhancing practitioner behavior change and improving patient behavior, knowledge and satisfaction; 2) the factors which determine the success of quality improvement strategies and to what extent these vary by the nature of the problem addressed and the target population; and 3) the factors which influence access to primary care services, and transitions between primary and specialty services.

Projects to evaluate the impact of managed care will constitute a systematic effort to determine the impact of managed care and other changes in the organization of care on health care quality; outcomes; and cost, use and access.

HHS Objective 3.3: Improve Access to and the Effectiveness of Health Care Services for Persons with Specific Needs

AHRQ will examine how various clinical and system characteristics affect the health outcomes, quality access, and satisfaction, for the elderly and chronically ill. In FY 2001, added emphasis will be given to research and tool development to improve care for persons with chronic conditions, including mental health conditions, and disabilities.

HHS Objective 3.4: Protect and Improve Beneficiary Health and Satisfaction with Medicare and Medicaid

AHRQ activities supporting Medicare and Medicaid beneficiaries will include:

1) research on conditions that are common, costly, and for which there is substantial variation in practice, conditions that represent major Medicare or Medicaid expenditures; 2) providing objective, science-based, timely information to health care decision makers-- patients and clinicians, health system leaders, and policy makers; 3) health care surveys, such as CAHPS® and MEPS, that provide information supporting health plan choices and coverage decisions; 4) new tools to assist beneficiaries to choose the most appropriate care for their needs; 5) new tools to measure and improve quality of life for Medicare and Medicaid beneficiaries; and 4) studying the national impact public programs on access and cost of care for children.

HHS Goal 4: Improve the Quality of Health Care and Human Services

HHS Objective 4.1: Promote the Appropriate Use of Effective Health Services

AHRQ is implementing a growing portfolio of evaluations that will show over time the outcomes of the investments of Agency funds. The Agency will evaluate the use and usability of the Medical Expenditures Panel Survey (MEPS) databases for their intended purposes. Other evaluations will assess: 1) evidence reports and technology assessments of evidence-based practice centers; and 2) products that advance methods to measure and improve health-care quality, including clinical quality improvement software (CONQUEST), the Consumer Assessment of Health Plans Survey, and the Expansion of Quality of Care Measures project (Q-SPAN). In FY 2001, be placed added emphasis on developing the tools, systems, and partnerships that enable quality improvement strategies to be effective in diverse settings, including public providers.

HHS Objective 4.2: Reduce Disparities in the Receipt of Quality Health Care Services

AHRQ will expand its commitment to conducting health services research that will help reduce disparities that exist for racial and ethnic minorities. In particular, the Agency will sponsor research to understand the contribution that racial discrimination makes to existing patterns of care for minority Americans. The Agency will also focus on building infrastructure for relevant research by training minority and other investigators to address issues for minority populations.

HHS Objective 4.3: Increase Consumers' Understanding of Their Health Care Options

The Consumer Assessment of Health Plans (CAHPS®) is a tool for surveying members of health plans about their experience with and assessment of the quality of health care they receive, and for reporting the results to other consumers who are choosing a plan. AHRQ will continue its efforts to enhance CAHPS® and evaluate its use. In FY 2001, additional research will be sponsored to better understand how consumers use quality information.

HHS Goal 5: Improve the Public Health System

HHS Objective 5.1: Improve the Public Health Systems' Capacity to Monitor The Health Status and Identify Threats to the Health of the Nation's Population

AHRQ will develop a fully integrated strategy to create the national capacity to monitor the quality of care, particularly for populations of national interest, including the chronically ill, poor, racial/ethnic minorities, and children. This includes an increase in the scope of the *Medical Expenditure Panel Survey* (MEPS), partnerships with other Federal Agencies and the private sector.

AHRQ will complete the redesign and expansion of the Healthcare Cost and Utilization Project (HCUP) providing state and community decision-makers a powerful set of linked databases they can use to monitor the impact of major system changes on access, quality, outcomes and cost in their states and communities, and to compare these against the progress of other states and communities.

AHRQ will build on past investments in tool development by focusing on expanding the toolbox. These tools will enable purchasers, policymakers, health plans, providers, and patients to improve care.

HHS Goal 6: Strengthen the Nation's Health Sciences Research Enterprise and Enhance its Productivity

HHS Objective 6.2: Improve the Prevention, Diagnosis, and Treatment of Disease and Disability

AHRQ will fund research on the prevention of functional decline in the elderly, the quality of clinical preventive services, and the prevention of medication and other medical errors.

HHS Objective 6.4: Increase the Understanding of and Response to the Major Issues Related to the Quality, Financing, Cost, and Cost-Effectiveness of Health Care Services

There are many gaps in knowledge in all areas of health care. New questions emerge as new technologies are developed, the population's demographics change, areas of inquiry previously under-emphasized take on greater importance, and research previously undertaken identifies further areas that need attention. Therefore, AHRQ will continue to focus on creating new knowledge and assessing the findings that result from completed projects.

HHS Objective 6.6: Improve the Quality of Medical and Health Science Research by Strengthening the Base of Highly Qualified Scientific Investigators

AHRQ will invest in a number of programs to further the training of health services researchers to address the research and analytic needs of the changing health care system. These priorities will build on prior efforts to make both curricula and practical research experiences more relevant to decision makers' concerns about the effectiveness of health care and issues of cost, quality, and access. In addition, an added emphasis is being made on increasing the number of minority investigators at both majority and minority institutions.

HHS Objective 6.7: Ensure That Research Results Are Effectively Communicated to the Public, Practitioners, and the Scientific Community

Building on the previous 10 years of research findings, AHRQ will identify ongoing gaps between what we know now and what we do in health care and will begin to close those gaps through research and demonstrations that develop and test implementation strategies in different settings in the health care system. A major focus within this is identifying existing implementation strategies in use in health care settings and demonstrating their applicability to wide spread dissemination in other areas of the system.

AHRQ places considerable focus on developing tools and products that facilitate the transfer of research findings into practice. The Agency has a well developed dissemination system that includes publications development, the Publications Clearinghouse, and an award winning Web site. This emphasis is critical to the Agency's success. Ongoing plans include incorporating regular customer feedback into our operations to continue to improve our efforts.

A.3 Performance Measurement Linkages with Budget, Cost Accounting, Information Technology Planning, Capital Planning and Program Evaluation

BUDGET LINKAGE

The performance goals and measures are linked directly to two of the Agency's three budget lines. As described previously, the budget line for Research on Health Care Costs, Quality, and Outcomes has five of the six performance plan goals tied to it. The budget line for the Medical Panel Expenditure Surveys is represented in the sixth goal. The Introduction to Part 2 of this document describes these alignments in detail.

The third budget line, Program Support, has been removed from the performance goals in the AHRQ performance plan. The measures previously reported for Program Support focused on internal management issues for contracts management and information system development. We are dropping the measures because they do not rise to the level of being one of the "critical few" measures that should be reported by the Agency in the GPRA plan. The measures continue to be important, however, and remain in place for internal accountability in the Office of Management Operations Plan and performance plans for the managers and staff.

The Agency provides page numbers, both in the body of the performance plan and in the summary table in section 1.4, to crosswalk the specific measures that are related to the programs proposed in the budget document. Many of the measures are for projects and initiatives that were started in past years and are continuing. This has been noted by identifying the budget connection as "commitment base."

COST ACCOUNTING

AHRQ allocates the full cost of all associated research activities, including overhead costs, by our three budget activities: Research on Health Costs, Quality and Outcomes, Medical Expenditure Panel Surveys, and Program Support.

INFORMATION TECHNOLOGY

AHRQ is currently completing the infrastructure for a new integrated information system, the Agency Management Information System (AMIS).

PLANNING

The goal of AMIS is to provide access to an integrated set of project information that includes the information currently input through multiple systems. When the AMIS is fully operational all Agency staff will have on-demand access to current information for the entire AHRQ research grant, contract, intramural project, and IAA portfolio. This system is one of the major methods the Agency will use to collect data to document its success in meeting its GPRA goals.

CAPITOL PLANNING Does not apply to AHRQ.

PROGRAM EVALUATION

Goal 4 in the AHRQ annual performance plan is devoted to reporting the evaluations that the Agency will do in FY 2002. The evaluations are focused on demonstrating the use of Agency research and products and the resulting impact on organizations within the health care system.

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FISCAL YEAR **2001** PERFORMANCE Summary

Summary of Performance Objectives

Budget Line 1: Research on Health Costs, Quality, and Outcomes

GPRA Goal 1: Establish research agenda based on users' needs.

NOTE: B: is Budget; Page: will have entered a page number; CB is commitment base. Under Actual Performance column the corresponding page (p., pp.) #s of the GPRA report are noted.

Performance Objective	FY Targets	Actual Performance	Reference
Objective 1.1: Define direction of FY project funding priorities, in large part, by needs assessment activities.	02: C Agency research agenda covering strategic goal areas for FY 2002 priorities (investigator-initiated research, national quality report, national disparities report) is documented by March 2002 based on consultations with various groups.		CB
	01: C Agency research agenda covering strategic goal areas for FY 2001 priorities (patient safety and informatics) is documented based on consultations with various groups.	Completed.	CB
	00: C Agency research agenda covering the 3 strategic research goals and the new FY 2000 closing the gap initiatives are documented based on consultations with various groups.	Completed.	B:3
	99: C Agency research agenda covering the 3 strategic research goals is developed in FY 99 and documented based on consultations with various groups.	Completed. P. 40 and Appendix 5.	

GPRA Goal 2: Make significant contributions to the effective functioning of the U.S. health care system through the creation of new knowledge.

Performance Objective	FY Targets	Actual Performance	Reference
<p>01 - 02 Objective 2.1: Determine annually the salient findings from research in each of the three areas (outcomes; quality; and cost, access, and use) and develop plan for next steps translation and dissemination.</p>	<p>02: C Produce an annual report on at least 18 science advances covering the three research goal areas (outcomes; quality; cost, access, and use). C For each finding, specific steps in translation and dissemination are identified and initiated. C Generate 2 - 3 synthesis reports on research findings and practical applications on Agency priority topics.</p> <p>01: C Produce an annual report on at least 12 science advances covering the three research goal areas (outcomes; quality; cost, access, and use) For each finding, specific steps in translation and dissemination are identified and initiated. C Generate 2 - 3 synthesis reports on research findings and practical applications on Agency priority topics.</p>	<p>Completed.</p> <p>Completed.</p>	<p>CB</p> <p>CB</p>
<p>00 Objective 2.1: Determine annually the salient findings from research in each of the three areas (outcomes; quality; and cost, access, and use) and develop plan for next steps translation and dissemination.</p>	<p>00: C Annual report on science advances in three research goal areas.</p> <p>C At least four major findings in each area that have potential to save significant amounts of money, improve quality, save lives or prevent physical suffering, or change the organization and delivery of health care.</p>	<p>Completed.</p> <p>Completed.</p>	<p>CB</p>

	C	For each finding, specific steps in translation and dissemination are identified and initiated.	Completed.	
99 Objective 2.1: Determine the salient findings from research for three priority populations and develop plan for next steps in translation and dissemination.	99: \$	A report produced that synthesizes research on the major health concerns of at least three priority populations.	Completed. (Appendix 6).	
Objective 2:2: Achieve significant findings from AHRQ sponsored and conducted research.	02: \$	Findings from at least 20 AHRQ sponsored or conducted research are used by public and private partners to improve health care.		CB
	01:	same as 00, except changed to 40 findings	Completed.	CB
	00: \$	Findings from at least 25 AHRQ sponsored or conducted research are published in major peer reviewed professional publications (<i>New England Journal of Medicine, Journal of American Medical Association, etc.</i>); receive national press coverage; are used in Federal or State policymaking; are used by professional associations or health plans as the basis of strategies to achieve quality; or are used to establish coverage decisions by health care purchasers, managed care organizations, or insurers, including Medicare or Medicaid.	400% increase: 250 citations for AHRQ findings (20 listed). 32 examples of major media coverage; 7 examples of usage	CB
	99:	Findings from at least 10 AHRQ sponsored or funded research are published in major peer reviewed professional publications (<i>New England Journal of Medicine, Journal of American Medical Association, etc.</i>); receive national press coverage; are used in Federal or State policymaking; are used by professional associations or health plans as the basis of strategies to achieve quality; or are used to establish coverage decisions by health care	50 citations for AHRQ findings; 7 examples of major media coverage; 7 examples of	

	purchasers, managed care organizations, or insurers, including Medicare or Medicaid.	usage.	
01 - 02 Objective 2.3: Initiate FY Research Initiatives	<p>02: Funding of a minimum of 100 projects; 30% of these projects address priority populations.</p> <p>01: Funding of a minimum of 60 projects in the following areas:</p> <ul style="list-style-type: none"> C 40 projects in reducing medical errors and enhancing patient safety C 10 projects in informatics applications in health care C 10 projects in quality improvement through improvements in health care working conditions 	<p>Completed.</p> <p>Completed.</p> <p>Completed.</p>	<p>B:64</p> <p>B:31-35</p> <p>B:33</p> <p>B:36-37</p>
00 Objective 2.3: Implement FY 2000 priority (1) ANew Research on Priority Health Issues.@	<ul style="list-style-type: none"> C Funding of a minimum of 10 projects that address gaps in knowledge about the priority problems faced by Medicare and Medicaid. C Funding of a minimum of 10 projects to address eliminating disparities in health care with particular emphasis on disparities that exist for racial and ethnic minorities. 	<p>43 projects funded</p> <p>More than 30 projects funded</p>	<p>B:19-20</p> <p>B:50-51</p>
99 Objective 2.3 Initiate FY 99 Research Initiatives	<p>Funding of a minimum of 21 projects in:</p> <ul style="list-style-type: none"> C consumers use of information on quality C strengthen value-based purchasing C measure national health care quality C vulnerable populations C translating research into practice <p>Funding of a minimum of 17 projects in:</p> <ul style="list-style-type: none"> C Outcomes for the elderly and chronically ill C Clinical preventive services C CERTS C Improving the quality of childrens health 	<p>56 projects funded.</p> <p>51 projects funded.</p> <p>Details on p. 47.</p>	

Goal 3:	Foster translation and dissemination of new knowledge into practice by developing and providing information, products, and tools on outcomes; quality; and access, cost, and use of care.
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Performance Objective	FY Targets	Actual Performance	Reference
<p>01 - 02 Objective 3.1: Maximize dissemination of information, tools, and products developed from research results for use in practice settings.</p> <p>NOTE: in the FY 2001 plan, objective 3.1 and 3.2 have been consolidated.</p>	<p>02:</p> <p>C Number of state and local governments trained and/or receiving technical assistance through User Liaison Program (ULP).</p> <p>C At least 20 partnerships to disseminate and implement research findings are formed with public and private-sector organizations.</p> <p>C Synthesis of at least 5 grant portfolio areas on quality of care across Agency-s goals for persons with chronic care needs produced and disseminated with particular focus on outreach to managed care executives.</p>	<p>Completed. Completed.</p> <p>16.7m. 4,006 3,730 425</p>	<p>CB</p> <p>CB</p>
	<p>01:</p> <p>C At least 5 public-private partnerships are formed to implement research findings for decisionmakers.</p> <p>C Formation of a minimum of 10 partnerships to support dissemination of AHRQ products through intermediary organizations, such as health plans and professional organizations.</p> <p>C Number of hits on the Web site</p> <p>C Number of inquiries handled on web site</p> <p>C Number of Uploaded documents.</p> <p>C Number of State and local governments trained in the</p>		<p>CB for all web site measures and ULP</p>

	understanding and use of health services research findings through ULP Workshops .			
00 & 99 Objective 3.1: Promote distribution of AHRQ publications, products, and tools through intermediary organizations.	00:	Formation of a minimum of 5 partnerships to support dissemination of AHRQ products through intermediary organizations, such as health plans and professional organizations.	Over 30 public/private and public/public partnerships formed. Over 30 public/private and public/public partnerships formed	CB
	99:	Formation of a minimum of 5 partnerships to support dissemination of AHRQ products through intermediary organizations, such as health plans and professional organizations.		
01 - 02 Objective 3.2: Develop and facilitate the use of new tools, talent, products, and implementation methodologies stemming from research portfolio. (This is objective 3.3 in FY 99-00)	02:	Produce evidence summaries for use in Federal direct care providers=efforts to create guidelines.		CB
	C	Evidence-based practice centers (EPCs) will produce a minimum of 18 evidence reports and technology assessments that can serve as the basis for interventions to enhance health outcomes and quality by improving practice.		CB
	C	Fund at least 10 projects in tool and data development.		CB
	01:	Produce evidence summaries for use in Federal direct care providers=efforts to create guidelines.	Completed.	CB
	C	EPCs will produce a minimum of 12 evidence reports and technology assessments that can serve as the basis for interventions to enhance health outcomes and quality by improving practice.	Completed.	
	C	Support a minimum of 165 pre- and post-doctoral trainees.	Completed.	
	C	Support up to 3 Minority Research Infrastructure Support Program IM-RISP) grants in order to develop the health services research capabilities of traditionally minority-serving institutions.	Completed.	

	C	Support up to 6 Building Research Infrastructure and Capacity (BRIC) two-year planning grants in EPSCOR states and states which historically have received little or no research support from AHRQ.	Completed.	
	C	Fund at least 10 projects in tool development.		
99 - 00 Objective 3.2: Maximize dissemination of information, tools, and products developed from research results for use in practice settings. (Becomes Objective 3/1 in FY 01.)	00:			
	C	Number of hits on the Web site	18.8 million hits	B:57
	C	Number of inquiries handled on web site.	3,500	B:57
	C	Number of Uploaded documents	4,400	B:57
	C	Reports from user surveys on how the information requested was used.	Completed	B:59
	C	Number of State and local governments trained in the understanding and use of health services research findings through User Liaison Program (ULP) Workshops	State - 50 Local - 29	CB
	C	+ Meetings held.	17 meetings	CB
	C	+ Number of attendees	1196 attend.	CB
	C	+ States represented.	50 States + D.C.	CB
	C	Reports from annual participants on how the information was used in decision-making.	Met	CB
C	Statistics on usage of National Guideline Clearinghouse including number of hits, requests, organizations, and total users.	Hits: 32,234,401 Requests: 18,207,430 Org-s: 58,803 User sessions 1.5 million	B:24- 25 B25:	

	C	Survey of a sample of NGC users to understand the impact of use on decisions and patient care.	902 respondents Evaluation to be completed in mid-year 2001	
	C	At least 10 purchasers/businesses use AHRQ findings to make decisions.	11 examples listed	
Goal 3 continued: Objective 3.2	99:			
	C	Number of hits on the Web site	15.5M	
	C	Number of inquiries handled on web site.	2,950	
	C	Number of Uploaded documents	4,000	
	C	Number of State and local governments trained in the understanding and use of health services research findings through User Liaison Program (ULP) Workshops	48 states; 4 territories; 30 county gov-ts; 9 city gov-ts	
	C	+ Meetings held.	18	
	C	+ Number of attendees	834	
	C	+ States represented.	48	
	C	Statistics on usage of National Guideline Clearinghouse including number of hits, requests, organizations, and total users.	13,590,013	
	C	At least 5 purchasers/businesses use AHRQ findings to make decisions.	21 examples listed. Further details, p 54	
Objective 3.3 (This becomes objective 3.2 in FY 01. Objective 3.3 is discontinued in FY 01.)	00			
	C	Demonstration of use of at least 3 AHRQ research findings in systematic efforts to Translate Research Into Practice.	Met	

<p>99 - 00 Objective 3.3: Develop and facilitate the use of new tools, talent, products, and implementation methodologies stemming from research portfolio.</p>	<p>C Funding of a minimum of 5 major projects that will develop products, tools, or methodologies for implementing research findings into practice in significant segments of the health care system (i.e., potential to be generalizable across health care systems, provider-types, or clinical areas.)</p> <p>C At least 2 new tools, products, or methodologies become available from projects funded between FY 1993 and FY 1996.</p> <p>C Support a five percent increase, at a minimum, in number of pre- and post-doctoral trainees.</p>	<p>29 Projects funded</p> <p>23 Listed</p> <p>40% Increase (further details, P.89)</p>	
<p>Goal 3, continued: Objective 3.3</p>	<p>99</p> <p>C Evidence-based Practice Centers (EPCs) produce a minimum of 12 evidence reports and technology assessments that can serve as the basis for interventions to enhance health outcomes and quality by improving practice (i.e., practice guidelines, quality measures, and other quality improvement tools). At least four reports are being used by customers to develop practice guidelines or other interventions.</p> <p>C The AHRQ software product, CONQUEST 2.0 released in FY 1999 containing new measures, including measures for new conditions, and updated measures. Contract awarded to create web-based product for more timely updating of information contained within product.</p> <p>C Funding of a minimum of 5 major projects that will develop products, tools, or methodologies for implementing research findings into practice in significant segments of the health care system (i.e., potential to be generalizable across health care systems, provider-types, or clinical areas.)</p> <p>C At least two new tools, products, or methodologies become available from projects funded between FY 1993 and FY 1996</p> <p>C Support a minimum of 150 pre- and post-doctoral trainees.</p>	<p>10 produced; 3 in press; 30 under development</p> <p>Released March 1999; contract to be awarded 9/00</p> <p>13 examples provided</p> <p>15 examples provided</p> <p>167 trainees</p> <p>Further details, p. 56</p>	

	<p>decisions.</p> <p>C Use of evidence reports or technology assessments and access to NGC site informed organizational decision making in at least 4 cases and resulted in changes in health care processes, quality, or health outcomes.</p> <p>01: Evidence-based Practice Centers</p> <p>C Use of evidence reports and technology assessments to create quality improvement tools in at least 10 organizations.</p> <p>C For at least four evidence reports or technology assessments per year, work with partners to measure how the reports or assessments were used and what impact they had on clinical decision making and patient care.</p> <p>Research</p> <p>C At least 3 examples of how research informed changes in policies or practices in other Federal agencies.</p>	<p>Completed.</p> <p>Completed.</p> <p>Completed.</p>	<p>CB</p>
<p>Goal 4 continued:</p> <p>01 Objective 4.1 Evaluate the impact of AHRQ sponsored products in advancing methods to measure and improve health care. Cont.</p>	<p>C Findings from at least 3 evidence reports or technology assessments will effect State or Federal health policy decisions.</p> <p>C Use of evidence reports or technology assessments and access to NGC site informed organizational decision-making in at least 4 cases and resulted in changes in health care procedures or health outcomes.</p> <p>Quality Measures</p> <p>C Achievable Benchmarks of Care are used for quality improvement activities by Peer Review Organizations</p> <p>C Use of dental performance measures by dental service and insurance organizations.</p> <p>C HCUP quality indicators incorporated into efforts by hospital associations and hospitals to improve the quality of care.</p>	<p>Completed.</p> <p>Completed.</p> <p>Completed.</p> <p>Completed.</p> <p>Completed.</p>	<p>CB</p> <p>CB</p> <p>CB</p>

	<p>National Guideline Clearinghouse</p> <p>C At least 10 users of the National Guideline Clearinghouse will use site to inform clinical care decisions</p> <p>C Guideline development or quality improvement efforts by users will be facilitated through use of NGC in at least 5 cases.</p> <p>C NGC information will be used to inform health policy decisions in at least 2 cases.</p> <p>C Improvements in clinical care will result from utilization of NGC information in at least 3 cases.</p> <p>Training Programs</p> <p>Two thirds of former pre- and postdoctoral institutional award trainees are active in the conduct or administration of health services research.</p>	<p>Completed.</p> <p>Completed.</p> <p>Completed.</p> <p>Completed.</p> <p>Completed.</p>	<p>CB</p> <p>CB</p>
<p>00 Objective 4.1 (& 4.2)*: Evaluate the impact of AHRQ sponsored products in advancing methods to measure and improve health care.</p> <p>* Objectives 4.1 and 4.2 were inadvertently the same. They have been consolidated to simplify the reporting.</p>	<p>00</p> <p>C AHRQ's HCUP Quality Indicators(QIs) will be redesigned based on consultations with state policy makers, researchers, hospital associations, and others about their past use of the QIs. By the end of March 2001, a new set of quality indicators will be defined and feedback obtained from a new set of HCUP QI users. In addition, AHRQ will provide access to recent national-level QI information via both the Internet and through published reports, with special focus on disseminating information to hospital users and organizations with responsibility for hospital quality reporting.</p> <p>C Use of evidence reports and technology assessments to create quality improvement tools in at least 10 organizations.</p> <p>C For at least four evidence reports or technology assessments per year, work with partners to measure how the reports or assessments were used and what impact they had on clinical decisionmaking and patient care.</p> <p>C At least three examples of how research informed changes in policies or practices in other Federal agencies.</p>	<p>HCUP QIs defined</p> <p>National-level QI information posted to Internet Sept 2000</p> <p>16 examples listed</p> <p>4 examples listed</p> <p>4 examples listed</p>	<p>CB</p>

	<p>C AHRQ will report on the extent to which CONQUEST assists those who are charged with carrying out quality measurement and improvement activities and the extent to which it helps further state-of-the-art in clinical performance measurement.</p> <p>C CAHPS7 has assisted the Health Care Financing Administration (HCFA) in informing Medicare beneficiaries about their health care choices. The use and impact of this information is determined by surveying a sample of these beneficiaries.</p> <p>C At least one quality measure from Q-span (or instances where AHRQ research contributes to the development of measures) are used in the Health Plan Employer Data Information Set (HEDIS) by the National Committee for Quality Assurance (NCQA), measurement activities of the Joint Commission for the Accreditation of Healthcare Organizations (JCAHO), or other organizations monitoring health care quality.</p>	<p>Completed (details p. 102)</p> <p>Completed. Results to be published in July 2001</p> <p>ABC System of performance profiling cited (details p. 103)</p>	
<p>Goal 4 continued:</p> <p>99 Objective 4.1 Evaluate the impact of AHRQ sponsored products in advancing methods to measure and improve health care. Cont.</p>	<p>99</p> <p>C An evaluation of the outcomes of outcomes research and the impact of AHRQ-supported outcomes and effectiveness research on clinical practice.</p> <p>C An evaluation and synthesis of (1) primary care research supported by AHRQ and (2) an assessment of the current state of the science and future directions for primary care research.</p> <p>C AHRQ-s state data strategy will be redesigned based on consultations with state policy makers, researchers, hospital associations, and others about their past use of data from the Healthcare Cost and Utilization Project (HCUP) as well as additional data needs.</p> <p>C Results of the evaluation of the Consumer Assessment of Health Plan Study (CAHPS7) will be used to improve the usability and usefulness of the tool. Findings are expected to show whether (a) the survey-based information from CAHPS7 helps consumers make better health care decisions, (b) the information increases consumer confidence when choosing</p>	<p>Completed</p> <p>Progress report (details p.64) Completed</p> <p>Preliminary results.</p>	

	C	health care plan, and (3) CAHPS7 is used by public and private organizations. Evaluation studies on: (1) the quality and usefulness of the evidence reports and technology assessments produced by the Evidence-based Practice Centers and (2) the impact of the use of these products on the health care system will be developed and initiated in FY 1999.	Final report received in June 2000.	
01 - 02 Objective 4.2: Evaluate the impact of MEPS data and associated products on policymaking and research products.	02			
	C	Have a fully functional MEPS-based MEDSIM model to allow simulation of the potential impact of programmatic changes in health care financing and delivery Dec 2002.		CB
	C	Produce baseline FY statistics on number of MEPS-based articles published in peer review journals.		CB
	C	Conduct customer satisfaction survey for MEPS workshop participants to assess how MEPS data is being used to inform research and public policy.		CB
	C	Develop marketing plan to promote the MEPS-IC data to state officials Dec 2002.		CB
	C	At least 5 examples of how research using MEPS has been used to inform decisions by Federal, state and private sector policymakers.		CB
	01			
	C	Use of MEPS data in AHRQ research applications will increase by 10 percent over number received in baseline period of 2000	Not attained.	CB
	C	Feedback from MEPS workshop participants indicating that they were useful and timely.	Completed.	CB
	C	At least 5 examples of how research using MEPS has been used to inform decisions by Federal, state and private sector policymakers.	Completed.	CB
00	See above 4.1 for 00			
99: Objective 4.2: Evaluate major	C	AHRQ Clearinghouse customer satisfaction rated at 98%.	Met.	CB

dissemination mechanisms.	C Customer satisfaction data on AHRQ consumer publications (useful/relevant) rated at 90%.	81.3%	
<p>01 Objective 4.3 n/a</p> <p>00 Objective 4.3: Evaluate the impact of MEPS data and associated products on policymaking and research projects.</p> <p>99: n/a</p>	<p>C Use of MEPS data in 1% of research applications received by AHRQ.</p> <p>C Distribution of MEPS data sets to at least 2500 requestors.</p> <p>C At least 5 examples of how research using MEPS has been used to inform decisions by Federal, state, and private sector policymakers.</p> <p>C Feedback from recipients of MEPS data indicating that the data were timely, useful, and of high significance.</p>	<p>MEPS used in 31% of funded projects</p> <p>5,700 data sets; 379 CD ROM-s</p> <p>15 examples given</p> <p>Met.</p>	

GPRA Goal 5: Support initiative to improve health care quality through leadership and research.

Performance Objective	FY Targets	Actual Performance	Reference
<p>00 - 02 Objective 5.1: Conduct research to help to measure the current status health of care quality in the Nation.</p> <p>99 Objective 5.1: Provide</p>	<p>02 \$ Integration of at least one private sector data source into the national quality report by 31 December 2002.</p>		<p>B:35-36</p>
	<p>01 C QI Taxonomy meeting held under the auspices of the QuIC.</p>	<p>Completed.</p>	<p>CB</p>
	<p>C Number of grants and contracts funded in FY2001 that will help to fill gaps in the information available to assess the national quality of care, or will help to expand the use of current measures to provide a broader or richer picture of quality.</p>	<p>Completed.</p>	
	<p>00 C Data sources identified that will contribute information as part of the mosaic picture of quality of care in the Nation.</p>	<p>Final recommend. March 2001</p>	<p>CB</p>
	<p>C Develop and begin to test some questions to be added to existing data collection activities to provide a better picture of quality.</p>	<p>Survey completed. Fielded during FY 2001</p>	<p>CB</p>
	<p>C Develop framework for National Healthcare Quality Report.</p>	<p>Final report 30 March 2001.</p>	<p>B:35</p>

<p>leadership for the Executive Branch-s Quality Interagency Coordination Task Force (QuIC)</p>	<p>C Provide leadership for the Executive Branch-s Quality Interagency Coordination Task Force (QuIC).</p> <p>99</p> <p>C Collaborative work groups are established under the QuIC under take projects with direct application to improving quality of care. In addition to the work on specific projects chosen by the QuIC, communication is facilitated on common issues such as: 1) Implementation of the Bill of Rights and Responsibilities from the President-s Commission on Consumer Protection and Quality in the Health Care Industry; And 2) organization or management strategies to improve quality of care.</p>	<p>Met: (details pp.110-111)</p> <p>Met.</p>	<p>CB</p>
<p>Goal 5 continued:</p> <p>00 - 02 Objective 5.2: Facilitate use of quality information to improve health care in the Nation.</p> <p>99 Objective 5.2: Conduct research to expand the tool box of measures and risk adjustment methods available help to measure the current status of quality in the nation.</p>	<p>02</p> <p>C Funding of at least 5 projects bringing healthcare information to the public in an understandable, user friendly manner which facilitates its use in decision making.</p> <p>01</p> <p>C Number of grants to improve patient safety.</p> <p>C Adoption of Agency sponsored research and tools developed by one or more users to facilitate consumers/purchaser/decision- maker use of information about quality</p> <p>00</p> <p>C Development of at least one tool that can be used by large group purchasers in assisting their beneficiaries to choose the health care plan, provider, or hospital that best meets their needs.</p> <p>99</p> <p>C Inventory of measures and risk adjustment methods currently in use by Federal Agencies will be developed.</p> <p>C Assessment of measures and risk adjustment methods needed by Federal Agencies will be conducted.</p>	<p>Funded > 40. Completed.</p> <p>3 examples given. Details pp. 112</p> <p>Met.</p> <p>Met.</p>	<p>CB</p> <p>B:31-35</p> <p>CB</p>

<p>00 - 02 Objective 5.3: Improve quality measurement.</p> <p>99 Objective 5.3: Inform health care organizational leaders and others how to design quality into their systems</p>	<p>02 C Adoption of at least one quality measure to be developed from our vulnerable populations RFA by a national accrediting organization.</p> <p>01 C Identification of collaborators for research projects on electronic medical records integrated with guidelines (e.g., from the Guideline Clearinghouse) or QI indicators (e.g., CONQUEST, QI Taxonomy project, HCUP measures).</p> <p>C Adoption of Living With Illness children's health measure by NCQA.</p> <p>00 C Sponsor research to fill existing gaps in quality measures in areas of high need.</p> <p>99 C Review research conducted that identifies appropriate ways of redesigning health care delivery systems to reduce errors.</p>	<p></p> <p>Completed.</p> <p>Completed.</p> <p>Met. (Details p.112)</p> <p>Met.</p>	<p>CB</p> <p>CB</p> <p>CB</p>
<p>00: Discontinued 99 Objective 5.4: Improve understanding of how to ensure that research affects clinical practice as appropriate</p>	<p>99 C Research on effective dissemination of information to decisions makers including patients, clinicians, organizational leaders, purchasers, and public policy makers conducted.</p>	<p>Met.</p>	

Budget Line 2:

Medical Panel Expenditure Surveys

GPRA Goal 6: Collect current data and create data tapes and associated products on health care use and expenditure for use by public and private-sector decision makers and researchers. (Medical Expenditure Panel Surveys)

Performance Objective	FY Targets	Actual Performance	Reference
<p>99 - 02 Objective 6.1: Release and disseminate MEPS data and information products in timely manner for use by researchers, policy makers, purchasers, and plans.</p>	<p>02 C Develop a method to facilitate users=custom cross tabulations of MEPS data. C Conduct six MEPS data user workshops. C Expand MEPS list-server participation by 20%. C Produce 4 Findings and at least one Chartbook. C Develop Frequently Asked Questions Section for MEPS web site.</p>		<p>CB</p>
<p>99 - 02 Objective 6.1: Release and disseminate MEPS data and information products in timely manner for use by researchers, policy makers, purchasers, and plans. Cont.</p>	<p>01 C In FY2001, 1997 Use and Expenditures, 2000 Point-in-Time, and 1998 Health Insurance and Demographics MEPS public use data files will be released. C Response time for requests received for information, assistance or specific products is as promised 95 percent of time</p> <p>00 C Core MEPS public use files (PUFs) available through Web site and CD-ROM within 9-18 months after data collection completed. C Specific products due in FY2000: + 1999 point-in-time file + 1997 expenditure data</p>	<p>Completed.</p> <p>Completed.</p> <p>Available within 12 mos</p> <p>Released: -July 2000</p>	<p>CB</p> <p>CB</p> <p>CB</p> <p>CB</p>

	<p>available</p> <p>+ 1996 full panel file available</p> <p>C Customer satisfaction data from use of MEPS tapes and products rated at least 90%.</p> <p>C Response time for requests received from policymakers, purchasers and plans for MEPS data tapes, analyses, and/or reports responded to within promised time frames 95% of time.</p> <p>99</p> <p>C Core MEPS public use files (PUFs) available through Website and CD-ROM within 9-12 months after data collection completed.</p> <p>C Specific products due in FY 1999:</p> <ul style="list-style-type: none"> + 1997 point-in-time file. + 1996 full-year expenditure file. + 1996 full-year event, job, and condition files. <p>+ 1998 point- in- time file.</p>	<p>-Available 1st quarter 2001</p> <p>-Jan 2000</p> <p>Rated at 90%</p> <p>96% within 4 days</p> <p>Significant progress made.</p> <p>Delivered: March 1999</p> <p>Dec. 1999</p> <p>Job and Condition Files delivered November 1999 and August 1999 respectively; event files will be available by March, 2000</p> <p>Dec. 1999</p>	<p>CB</p> <p>CB</p> <p>CB</p> <p>CB</p>
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<p>Goal 6 continued: Objective 6.1</p>	<p>C Research findings and survey reports developed and disseminated for use by policy makers and researchers including <i>MEPS Research Findings</i>, <i>MEPS Highlights</i>, chart books, peer-reviewed journal articles, book published on contributions of expenditure surveys to policy making, publications oriented toward non-researchers.)</p> <p>C Customer satisfaction data from use of MEPS tapes and products rated at 85%.</p> <p>C Requests received from policy makers, purchasers and plans for MEPS data tapes, analyses, and/or reports responded to within promised time frames 85% of the time.</p>	<p>30+ publications related to MEPS</p> <p>Ratings between 86-96%</p> <p>Requests filled within 5 days uniformly.</p> <p>p.81</p>	<p>B:A5-A-6</p> <p>CB</p> <p>CB</p>
<p>Goal 6 continued: 99 - 02 Objective 6.2: Facilitate use of MEPS data and associated products as tools by extramural researchers, policy makers, purchasers, and plans.</p>	<p>02</p> <p>C Determine the feasibility of existing mechanisms to provide off-site access to confidential MEPS data.</p> <p>C Expand data center capacity by 10% over FY 01 level.</p> <p>01</p> <p>C Establish baseline for Data Center use capacity.</p> <p>00</p>	<p>Completed.</p>	<p>CB</p> <p>CB</p> <p>CB</p>

	<p>C Data centers operational + # requests for use of the centers + # user-days at the data centers + # projects completed</p> <p>99</p> <p>C Inclusion of MEPS data in extramural research grants with AHRQ and other funders.</p> <p>C Plan for extramural researcher access to MEPS data fully implemented</p>	<p>Deferred to Jan 2001 (Details p.116)</p> <p>Included in 20 applications, 5 funded.</p> <p>Met. Fully up Feb. 2000.</p>	<p>CB</p>
<p>01 - 02 Objective 6.3: Modify MEPS to support annual reporting on quality, health care disparities, and research on long-term care in adults and children with special needs.</p>	<p>02</p> <p>C Process and make available data to be included in the National Quality Report.</p> <p>C Begin data collection to support the disparities report Sept 2002.</p> <p>01</p> <p>C Data collection begins on the treatment of common clinical conditions over time for a nationally representative portion of the population in support of the National Healthcare Quality Report.</p> <p>\$ LTC Measures: 1. Have developed data use agreements (DUA) with HCFA to assess and begin data development related to the MDS. 2. Design MEPS over sample of adults with functional limitations and children with special needs. 3. Produce one report related to LTC. 4. Have developed IAA with NCHS for LTC frame development activities. 5. Submit at least one peer-reviewed publication in the area of LTC.</p>	<p>Completed.</p> <p>Completed.</p> <p>Not funded.</p> <p>Completed. Not funded. Completed.</p>	<p>B:78</p> <p>B:78</p> <p>CB</p> <p>CB</p>

<p>00 Objective 6.3: Modify and enhance MEPS to enable reporting on the quality of health care in America as part of FY 2000 Priority (3), ANew Tools for a New Century.@</p>	<p>00: \$ The design decisions necessary for the expansion of MEPS databases in order to collect data that will support the National Healthcare Quality Report are completed by August 2000. The design decisions will be operationalized in the coming fiscal years.</p>	<p>Met. (Details pp. 117-119)</p>	
<p>99 Objective 6.3: Modify and enhance MEPS to enable reporting on the quality of health care in America.</p>	<p>99 C MEPS Household Survey: Interviews with 9,000 previously surveyed families to obtain calendar year 1998 health care data, and with 5,600 new families. C MEPS Medical Provider Survey: Interviews with approximately 3,000 facilities, 12,000 office-based providers, 7,000 hospital-identified physicians, and more than 500 home health providers. C MEPS Insurance Component (MEPS-IC): Interviews with more than 40,000 employers and 1,000 insurance carriers. C MEPS data collection successfully moved to ongoing survey mode from data collection every ten years.</p>	<p>Met. Met. Met. Met. p. 82</p>	

Budget Line 3:

Program Support

GPRA Goal 7: Support the overall direction and management of AHRQ

Summary of Performance Objectives

Performance Objective	FY Targets	Actual Performance	Reference
Objective 7.1 is mandatory (Capital Assets) but not applicable to AHRQ.			
00-99 Objective 7.2: Maintain acquisition performance management system to ensure: (1) timely completion of transactions, (2) vendor and customer satisfaction, and (3) efficient and effective use of resources.	01 DISCONTINUED		
	00 C Internal customer satisfaction rated at minimum of 4.5/5.	Rated 4.2 (Details p. 123)	CB
	C External customer satisfaction rated at 4.5/5.	Rated 4.6	CB
	C Customer satisfaction survey results assessed and used to implement changes to improve and enhance services.	Met. (Details p. 123)	CB
	99 C Internal customer satisfaction rated at minimum of 4.5/5. C External customer satisfaction rated at 4/5. C Customer satisfaction survey results assessed and used to implement changes to improve and enhance services.	4.4 4.0 Met. (Details p. 85)	CB
Goal 7 continued: 00-99 Objective 7.3. Continued enhancement and expansion of Agency	01 DISCONTINUED 00 C Customer satisfaction rated at minimum of 3.5/4.	3.2/5.0	CB

Intranet site to ensure staff have immediate access to all current information.	C	Demonstration through customer satisfaction surveys that the daily work of staff has been facilitated by the Intranet.	Met. (Details pp. 123-124)	CB
	C	Assessment of customer satisfaction surveys and use of such surveys to implement changes to improve and enhance services as necessary.	Met. (Details p. 124)	CB
	99	Customer satisfaction rated at minimum of 3.5/4.	3.1/4	
	C	Customer satisfaction surveys assessed and used to implement changes to improve and enhance services as necessary.	Met	

Goal 7 continued: 01-02 Objective 7.4. Establish and maintain a secure Agency computer network infrastructure.	02 C	Perform initial tests, (periodically, beginning in 2nd quarter of FY 2002) to evaluate the preliminary policies and procedures.		CB
	01 C	Preliminary policies and procedures for reducing security risks will be developed by the end of FY 2001.	Completed.	CB
	C	Initial criteria for reporting security incidents will be established by the end of CY 2001.	Completed.	
	C	Initial procedures for responding to security incidents will be established by the end of CY 2001.	Completed.	
	C	Implementation of a Secure Phase 1 LAN for analysis of intramural research and survey data will be completed by end of FY-01.	Completed.	
	C	Implementation of a Phase 1 firewall, intrusion detection and virus control system will be in place by end of CY 2001.	Completed.	
	C	Initial security awareness training will begin by end of CY 2001.	Completed.	

Brief List of Patient Safety Awards

Supporting Demonstration Projects to Report Medical Errors Data			
Institution	City	State	Award
Georgia Hospital Association	Marietta	GA	\$1,636,373
University of Mississippi Medical Center	Jackson	MS	\$993,212
University of Colorado Health Center	Denver	CO	\$956,183
Massachusetts Department of Public Health	Boston	MA	\$1,295,658
Abt Associates, Inc.	Cambridge	MA	\$213,765
Indiana University	Indianapolis	IN	\$503,005
Medical College of Wisconsin	Milwaukee	WI	\$670,000
Center for Health Care Policy and Evaluation/United Health Group	Minneapolis	MN	\$190,118
Marshfield Medical Research Foundation	Marshfield	WI	\$137,564
Research Triangle Institute	Research Triangle Park	NC	\$200,000
Denver Health	Denver	CO	\$154,097
Johns Hopkins University	Baltimore	MD	\$1,519,620
Harvard University	Boston	MA	\$1,380,666
Health Research, Inc./New York State Department of Health	Albany	NY	\$1,734,580
Utah Department of Health	Salt Lake City	UT	\$1,500,933
Health Partners Research Foundation	Minneapolis	MN	\$401,802
University of Minnesota/Sponsored Projects Administration	Minneapolis	MN	\$294,759
American College of Surgeons	Chicago	IL	\$1,633,423
Columbia University	New York	NY	\$2,322,914
Washington University	St. Louis	MO	\$1,935,551
University of Pittsburgh	Pittsburgh	PA	\$1,600,514
Harvard Pilgrim Health Care	Brookline	MA	\$2,838,449
Denver Health	Denver	CO	\$244,760
Research Triangle Institute	Research Triangle Park	NC	\$299,999
		Total:	\$24,657,945

Using Computers and Information Technology to Prevent Medical Errors			
Institution	City	State	Award
DoctorQuality	Philadelphia	PA	\$99,354
Advance Medical Electronics Corporation	Fridley	MN	\$750,000
Protolex, LLC	Lanham	MD	\$97,578
Abacus Management	Cranston	RI	\$99,957
Montefiore Medical Center	New York	NY	\$486,805
Johns Hopkins University	Baltimore	MD	\$358,139
Creighton University	Omaha	NE	\$345,286
Intellegent Automation, Inc.	Rockville	MD	\$100,000
Compliance Laboratories, LLC	Lenexa	KS	\$99,935
Aptima, Inc.	Woburn	MA	\$100,000
University of Alabama	Birmingham	AL	\$255,289
University of California, Davis	Davis	CA	\$332,244
University of Chicago	Chicago	IL	\$275,179
Columbia University	New York	NY	\$356,099
Modus Operandi, Inc.	Indialantic	FL	\$100,000
Prediction Sciences	San Diego	CA	\$99,829
Simulation Technologies, Inc.	Huntsville	AL	\$99,969
Brown University	Providence	RI	\$349,938
Computing Solutions, Inc.	Cedar Rapids	IA	\$99,831
University of Washington	Seattle	WA	\$303,069
Foundation for Long Term Care	Albany	NY	\$419,328
Pharmacon International, Inc.	New York	NY	\$99,985
		Total:	\$5,327,814

Understanding the Impact of Working Conditions on Patient Safety			
Institution	City	State	Award
Oregon Health & Science University	Portland	OR	\$283,436
Brigham and Women's Hospital/Harvard Medical School	Boston	MA	\$499,689
University of California, San Francisco School of Nursing	San Francisco	CA	\$394,068
University of Michigan	Ann Arbor	MI	\$31,116
University of Colorado Health Sciences Center School of Nursing	Denver	CO	\$361,100
Massachusetts General Hospital	Boston	MA	\$493,733
American College of Surgeons	Chicago	IL	\$461,607
National Academy of Sciences	Washington	DC	\$500,000
		Total:	\$3,024,749

Developing Innovative Approaches to Improving Patient Safety			
Institution	City	State	Award
Hektoen Institute	Chicago	IL	\$199,978
University of Washington	Seattle	WA	\$199,986
RAND	Santa Monica	CA	\$50,000
University of Vermont	Burlington	VT	\$200,000
University of Florida	Gainesville	FL	\$191,617
Johns Hopkins University	Baltimore	MD	\$125,000
University of Chicago	Chicago	IL	\$168,371
University of Wisconsin	Madison	WI	\$200,000
University of California, San Diego	La Jolla	CA	\$190,616
University of Maryland Medical System	Baltimore	MD	\$200,000
Emory University	Atlanta	GA	\$184,361
Brigham and Women's Hospital	Boston	MA	\$981,773
University of Pennsylvania	Philadelphia	PA	\$1,310,903
Oregon Health & Science University	Portland	OR	\$198,979
Boston University	Boston	MA	\$199,999
New York University	New York	NY	\$199,919
Kaiser Foundation Research Institute	Oakland	CA	\$331,946
University of California, Los Angeles	Los Angeles	CA	\$199,984
University of South Florida	Tampa	FL	\$199,354
University of Michigan	Ann Arbor	MI	\$200,000
American Academy of Family Physicians	Leawood	KS	\$196,344
Vanderbilt University	Nashville	TN	\$199,992
University of Texas Health Science Center	Houston	TX	\$1,418,949
		Total:	\$7,998,071

Disseminating Research Results			
Institution	City	State	Award
University of California, San Francisco	San Francisco	CA	\$747,239
Health Research and Educational Trust	Chicago	IL	\$352,079
American College of Surgeons	Chicago	IL	\$193,659
National Patient Safety Foundation	Chicago	IL	\$242,479
American College of Physicians-American Society of Internal Medicine	Philadelphia	PA	\$256,537
Harvard Pilgrim Healthcare	Brookline	MA	\$240,051
Stanford University	Stanford	CA	\$330,566
		Total:	\$2,362,610

Additional Patient Safety Research Initiatives			
Institution	City	State	Award
University of California, San Francisco	San Francisco	CA	\$438,209
National Academy of Sciences	Washington	DC	\$1,000,000
University of California, San Francisco	San Francisco	CA	\$560,312
Research Triangle Institute	Research Triangle Park	NC	\$238,027
Johns Hopkins University, School of Medicine	Baltimore	MD	\$500,000
MEDSTAT Group	Washington	DC	\$898,285
Barents Group	McLean	VA	\$499,889
Westat	Rockville	MD	\$1,124,496
Veterans Medical Research Foundation	San Diego	CA	\$96,844
User Liaison Program	Rockville	MD	\$1,000,000
		Total:	\$6,356,062