DEPARTMENT OF HEALTH AND HUMAN SERVICES

FISCAL YEAR 2005

Justification of Estimates for Appropriations Committees

Agency for Healthcare Research and Quality

Executive Summary of the FY 2005 Request

A. Mission and Vision

The Agency for Healthcare Research and Quality (AHRQ) 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."

The vision of the Agency is to foster health care research that helps the American health care system provide access to high quality, cost-effective services; to be accountable and responsive to consumers and purchasers; and, to improve health status and quality of life. An essential part of this vision is assuring that research findings are ready to use by health care decision makers: policy makers; private sector leaders; providers; clinicians; and patients/consumers.

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

B. Strategic Plan

The strategic plan serves as the road map for AHRQ activities. AHRQ has identified four strategic goals, each of which will contribute to improving the quality of health care for all Americans.

<u>AHRQ Goal 1. Safety/Quality.</u> Improve health care safety and quality for all Americans through evidence-based research and translation and to build capacity to improve the quality of health care for Americans.

<u>AHRQ Goal 2. Efficiency</u>. Develop strategies to improve access, foster appropriate use, and reduce unnecessary expenditures.

<u>AHRQ Goal 3. Effectiveness.</u> Translate, disseminate, and implement research findings that improve health care outcomes.

<u>AHRQ Goal 4. Organizational Excellence.</u> Develop efficient and responsive business processes.

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

It is AHRQ's intent to change our budget activity structure to mirror our new strategic plan goals. It is expected that this change will better elucidate AHRQ's research goals and accomplishments. This change will be piloted in FY 2004. In continuing AHRQ's commitment to budget and performance integration, AHRQ recently reorganized the management structure. This new structure aligns those who are responsible for budget formulation, execution, and providing services and guidance in all aspects of financial management with those who are responsible for planning, performance measurement, and evaluation. These functions are now within one office: Office of Planning, Accountability, Resources, and Technology.

C. Accomplishments by Portfolio of Work

Over time, AHQR plans to provide detailed information about each strategic plan goal by a standard portfolio of work. Based on an analysis of current investments, Department priorities and our mission as articulated by the Congress in authorizing legislation, AHRQ has developed 11 standard portfolios of work. They include:

- Bioterrorism
- Data development
- Chronic care management
- Socio-economics of health care
- Informatics
- Long-term care

- Pharmaceutical outcomes
- Prevention
- Training
- Quality/safety of patient care
- Organizational support

The FY 2005 Request is AHRQ's first submission using the new strategic goal areas and the portfolios of work. At this point in time, AHRQ can only provide detailed reporting by one overarching portfolio of work. As the year progresses, AHRQ will move toward providing this information for each strategic plan goal and making transparent how each supports the overarching mission of improving health care quality. The table below highlights how AHRQ's portfolios of work are linked to our strategic plan.

	AHRQ STRATEGIC GOAL AREAS			
	SAFETY/QUALITY - Improve health care safety and quality for Americans through evidence based research and translation.	EFFICIENCY - Develop strategies to improve access, foster appropriate use, and reduce unnecessary expenditures.	EFFECTIVENESS - Translate, disseminate, and implement research findings that improve health care outcomes.	ORGANIZATIONAL EXCELLENCE - Develop efficient and responsive business processes.
AHRQ PORTFOLIOS OF WORK				
Bioterrorism	X	Х	Х	
Data Development		Х	Х	
Chronic Care Management	Х	Х	Х	
Socio-Economics of Health Care		Х	Х	
Informatics Long-Term Care Pharmaceutical	Х	Х	Х	
Long-Term Care		Х	Х	
Outcomes	Х	Х	Х	
Prevention			Х	
Prevention Training	Х	Х	Х	
Quality/Safety of Patient Care	Х	Х	Х	
Organizational Support				Х

D. Overview of the Performance Plan and Performance Report

The AHRQ Performance Plan is a companion piece to the AHRQ Strategic Plan and to the FY 2005 Budget Request. In this document the initial FY 2005 and revised FY 2004 Performance Plans have been merged with the FY 2003 Performance Report to comply with the format developed by the Department of Health and Human Services (DHHS).

The 2005 Performance Plan focuses on addressing the Agency's vision, mission and strategic goal areas of safety, effectiveness, efficiency and organizational excellence. Within those goal areas, the agency aligns its 11 portfolios of work – activities grouped by categories that reflect agency investments.

E. Program Assessment Rating Tool (PART) Assessments

FY 2004 - Data Collection and Dissemination

AHRQ collects data on the cost (Medical Expenditure Panel Survey), use (Healthcare Cost and Utilization Project), and the quality of health care in the United States and develops and surveys beneficiaries regarding their health care plans (Consumer Assessment of Health Plans). In the FY 2005 Request, AHRQ continues the \$5,000,000 provided in the FY 2004 Enacted to support efforts to ensure continued collection and availability of national health care cost, use, and quality data. These funds will be directed to performance-based improvements for the three data collection and dissemination programs.

FY 2004 - Translating Research into Practice

In FY 2005, AHRQ is requesting \$10,400,000, an increase of \$3,400,000 from the FY 2004 Enacted, for studies focused on translating research into practice (TRIP). The increase in funds is attributable to AHRQ's new grant and contract program: Research Empowering America's Changing Healthcare System (REACHES). These grants and contracts will expand work in the

area of adopting research findings in real-world settings, assessing their impact and generalizability, and promoting rapid uptake of successful efforts.

This program refocuses TRIP activities to include activities other than just research grants. This places greater emphasis on translation, dissemination, and implementation in a broader sense. AHRQ's revision of the strategic plan/goals and its organizational realignment was specifically designed to assure successful implementation of evidence-based findings.

Agency for Healthcare Research and Quality Data Collection and Dissemination/Translating Research Into Practice (TRIP)				
Recommendation	Completion Date	On Track? (Y/N)	Comments on Status	
No				
Recommendations	N/A	N/A	N/A	

F. Research Coordination Council

AHRQ staff fully participated in the Research Coordination Council (RCC) workgroups which reviewed the FY 2005 research budget requests submitted by the agencies and assisted in the development of findings and recommendations for consideration by the Secretary's Budget Council. The purpose of these workgroups is to identify ways to increase the efficient use of existing resources by identifying opportunities to collaborate with other Agencies. The following are some examples of how AHRQ contributed to the RCC:

- Potential for overlapping areas of focus or gaps in research efforts:
 - Efforts include the Health Care Information Technology (HIT) program which covers improvements in the Indian Health Service's electronic health record and joint programming with Centers for Medicare and Medicaid Services (CMS).
- Fostered increased collaboration and coordination with other DHHS Agencies:
 - AHRQ, Food and Drug Administration (FDA), the Center for Disease Control (CDC), and CMS will jointly develop a National Patient Safety Network.
- RD&E program improvements or efficiencies related to the FY 2005 planning process
 - AHRQ, OASPE, CMS, NCHS, and NIA are working to improve the Department's long-term care data systems.
 - AHRQ, CDC, HRSA, IHS and AOA will work collaboratively to implement the Prevention funding CDC received.

AHRQ has a long history of developing partnerships and collaborations with a variety of HHS organizations, other components of the Federal government, State and local governments and private-sector organizations, all of whom help us to achieve our goals. AHRQ will continue to work with the RCC it begins to implement the FY 2005 budget. In addition, AHRQ will strengthen and build upon these partnerships as it moves to implement its FY 2006 budget

request. The table below summarizes AHRQ's FY 2005 Research, Demonstration and Evaluation activities. These activities align with the Secretary's and President's priority areas and were included in our RCC discussions.

Res	earch Coordination Council Research Priority:	FY 2005 Budget Request (\$ in 000s)
I.	Working Toward Independence	\$0
II.	Rallying the Armies of Compassion	\$0
III.	No Child Left Behind	\$4,300
IV.	Promoting Active Aging and Improving Long-Term Care	\$9,000
V.	Protecting and Empowering Specific Populations	\$1,600
VI.	Helping the Uninsured and Increasing Access to Health Insurance	\$31,900
VII.	Realizing the Possibilities of 21 st Century Health Care	\$101,000*
VIII	Ensuring Our Homeland is Prepared to Respond to Health Emergencies	\$0
IX.	Understanding Health Differences and Disparities—Closing the Gaps	\$18,400
X.	Preventing Disease, Illness, and Injury	\$17,000
XI.	Agency-specific Priorities	\$11,300
	Total RD&E	\$194,500

^{* -} includes \$84m in Patient Safety

G. Summary of FY 2005 Request

The FY 2005 budget for AHRQ totals of \$303,695,000, maintaining the FY 2004 Enacted level. This Request allows AHRQ to support ongoing efforts to improve the quality, safety, outcomes, access to and cost and utilization of health care services.

The FY 2005 budget enables AHRQ to renew several grant programs that help support the health care quality infrastructure. These include Building Research Infrastructure & Capacity Program (BRIC), Minority Research Infrastructure Support Program (M-RISP), Centers for Education and Research on Therapeutics (CERTs) program, and Practice-Based Research Networks (PBRNs).

- AHRQ requests \$1,000,000 for the BRIC program which is intended to build the
 research capacity in States that have not traditionally been involved in health services
 research. Ten States received direct funding from this program in FY 2001. For
 example, in Mississippi where health care for children living in the Delta region is poor or
 nonexistent, a BRIC grantee has formed partnerships with several pediatric experts,
 including consultants from Harvard. These partnerships are essential to the
 Department's efforts to improve care for residents of this region.
- AHRQ requests \$3,400,000 to support four CERTs grants. The program is administered as a cooperative agreement by AHRQ in consultation with the FDA to promote the safe and effective use of therapeutics. The Centers have completed several important projects since their inception. For example, researchers at the University of North Carolina Center found a link between rickets in breast-fed children and a lack of vitamin D supplementation, especially among black infants. As a result of this study, the North Carolina Department of Health made vitamin "D" available free to breast-feeding women though its WIC program.

- AHRQ requests \$2,000,000 for core support of the work of primary care practice-based research networks (PBRNs). PBRNs are groups of community-based practices that work together with clinical investigators to study questions related to primary care and to assure that evidence-based findings are incorporated into actual practice. With current levels of funding, AHRQ has been able to support 40 networks nationwide. These networks include around 10,000 primary care providers (pediatricians, family physicians, general internists, and nurse practitioners) in community-based practices located in rural, suburban and inner-city settings in all 50 States. These clinicians provide care to around 10 million Americans.
- AHRQ requests \$1,000,000 to fund three additional M-RISP grants. The program was
 established to increase the capacity of institutions that serve racial and ethnic minorities
 to conduct rigorous health services research. The research conducted by these
 institutions focuses on the Departmental priorities of reducing racial and ethnic
 disparities and improving health for priority populations.

The Request also provides \$6,639,000 for continued support of the following research grant programs: small research grants, conference research grants, dissertation research grants, grant supplements, and the research career program. In addition, AHRQ will fund \$2,414,000 in new non-patient safety grants and \$3,947,000 in new non-patient safety contracts for Research Empowering America's Changing Healthcare System (REACHES). These grants and contracts will expand work in the area of adopting research findings in real-world settings, assessing their impact and generalizability, and promoting rapid uptake of successful efforts.

In FY 2005, AHRQ will continue its work in area of patient safety. Unfortunately, fatalities due to medical errors continue to occur in our heath care system. In early 2003, organ transplant patient Jessica Santillan died at Duke University Hospital after receiving a second heart and lung transplant when her body rejected the first transplant because those organs were not matched to her blood type. This tragedy is not attributable to a knowledge deficit, but demonstrates how critical it is that we continue to focus on the role that the *system* plays in patient care. AHRQ has found through its research that by creating a safe and effective system of care we can significantly reduce the number of errors that occur. AHRQ's patient safety program is aimed at identifying risks and hazards that lead to medical errors and finding ways to prevent patient injury associated with delivery of health care.

The FY 2005 Request of \$84,000,000, an increase of \$4,500,000 from the FY 2004 Enacted level, enables AHRQ to continue to support research activities that help healthcare providers, hospital and healthcare system leaders, and policymakers address the many challenges that they face and provides the foundation for which they can produce measurable quality improvements in health care.

H. Secretarial Priorities

At the requested level, AHRQ's programs will make important contributions to the Secretarial Priorities and Presidential Initiatives on improving the quality and safety of health care, costs, use and access to health care. AHRQ has worked closely with the Department's Research Coordination Council, Data Council and the Assistant Secretary for Planning and Evaluation (ASPE) so that investments in FY 2005 can be leveraged with the investments of other OPDIVs to achieve maximum impact. In addition, the Director of AHRQ co-chairs the Secretary's

Council on Applications of Health Information Technology to promote synergy across HHS investments in health information technology, i.e., to identify and implement initiatives that address multiple department objectives, such as improving quality and safety, identifying adverse events and potential warnings of bioterrorist attacks, and conducting research.

I. FY 2005 Budget Policy

The FY 2005 Request of \$303,695,000 maintains the FY 2004 Enacted level. This Request allows AHRQ to support ongoing efforts to improve the quality, safety, outcomes, access to and cost and utilization of health care services. Specifically, this increase will provide renewed support to eight enduring AHRQ grant programs; support for one new grant program; continue support of the Medical Expenditure Panel Survey (MEPS); continue research contract support for enduring AHRQ programs; and fund one new contract program.

The budget request is arrayed by AHRQ's budget activities: Research on Health Care Costs, Quality and Outcomes (HCQO), the Medical Expenditure Panel Survey (MEPS), and Program Support (PS). Details of the FY 2005 Request, by budget activity, are provided on the following page:

Difference Between FY 2004 and FY 2005 Funding Levels for Selected Activities	нсдо	MEPS	Program Support	TOTAL
Research and Training Grants	-\$14,855,000	\$0	\$0	-\$14,855,000
(Noncompeting Grants) (Noncompeting Patient Safety) (Noncompeting Non-Patient Safety)	(+\$5,341,000) (+\$30,052,000) (-\$24,711,000)			(+\$5,341,000) (+\$30,052,000) (-\$24,711,000)
(New and Renewed Grants) (New Patient Safety Grants) (New Non-Patient Safety Grants) (Supplements)	(-\$20,047,000) (-\$31,000,000) (+\$10,953,000)			(-\$20,047,000) (-\$31,000,000) (+\$10,953,000)
	(-\$149,000)			(-\$149,000)
Non-MEPS Research Contracts and IAAs	+\$12,955,000	\$0	\$0	+\$12,955,000
(Patient Safety Contracts) (Non-Patient Safety Contracts)	(+\$5,448,000) (+\$7,507,000)			(+\$5,448,000) (+\$7,507,000)
MEPS	+\$0	+\$0	\$0	+\$0
Research Management	+\$1,900,000	\$0	\$0	+\$1,900,000

TOTAL CHANGE	+\$0	+\$0	+\$0	+\$0

J. Mechanism Discussion

The FY 2005 research portfolio for AHRQ is as follows:

Research and Training Grants

The FY 2005 Request provides a decrease of \$14,855,000 for research and training grants over the FY 2004 Enacted level of \$113,770,000.

An increase of \$13,539,000 is requested to renew the following non-patient safety research programs: small grants, conference grants, dissertation grants, Centers for Education and Research on Therapeutics (CERTs), Building Research Infrastructure and Capacity Program (BRIC), the Minority Research Infrastructure Support Program, and Primary Care Practice-based Research Networks (PBRNs). An increase of \$500,000 is requested for grant supplements, for a total increase of \$14,039,000 for renewed grant programs. The FY 2005 Request also provides \$2,414,000 in new grant support for Research Empowering America's Changing Healthcare System (REACHES). These grants will expand work in the area of adopting research findings in real-world settings and assessing their impact and generalizability.

AHRQ is also requesting that the \$7,000,000 in planning grants for the Health Care Information Technology program (patient safety) that ended in FY 2004 be reinvested in FY 2005. In FY 2005, these funds will be used for implementation awards for communities that have completed a successful planning process in FY 2004.

Non-MEPS Research Contracts and IAAs

The FY 2005 Request provides an increase of \$12,955,000 for research contracts and IAAs from the FY 2004 Enacted level of \$82,625,000.

The FY 2005 Request for patient safety contracts and IAAs increases by \$5,488,000 from the FY 2004 Enacted level of \$25,740,000. A total of \$1,800,000 of this increase is for a new IAA to the Indian Health Service (IHS) for ambulatory information technology demonstrations.

The FY 2005 Request for non-patient safety contracts and IAAs is increased by \$7,507,000 from the FY 2004 Enacted level of \$51,564,000. A total of \$3,560,000 will be directed to enduring research contracts. In addition, AHRQ requests \$3,947,000 for new contracts focusing on Research Empowering America's Changing Healthcare System (REACHES). These contracts will be designed to further the adoption of research findings into real-world practice and assessment of their impact in our main portfolio areas.

Medical Expenditure Panel Survey (MEPS)

The FY 2005 Request maintains the FY 2004 Enacted level of \$55,300,000. More details can be found on page 62.

Research Management

In FY 2005, AHRQ requests an increase of \$1,900,000 for research management costs. These funds will provide for current services, including amortization of the FY 2004 pay raise and the FY 2005 pay raise.

The Unified Financial Management System (UFMS) is being implemented to replace five legacy accounting systems currently used across the Operating Divisions. The UFMS will integrate the Department's financial management structure and provide HHS leaders with a more timely and coordinated view of critical financial management information. The system will also facilitate shared services among the OPDIVs and thereby, help management reduce substantially the cost of providing accounting services throughout HHS. Similarly, UFMS, by generating timely, reliable, and consistent financial information, will enable the component agencies and program administrators to make more timely and informed decisions regarding their operations. AHRQ requests \$907,000 to support this effort in FY 2005.

AHRQ's FY 2005 Request includes funding to support the President's Management Agenda E-Gov priorities and Departmental enterprise information technology priorities identified through the HHS strategic planning process. Agency funds will be combined with resources in the Information Technology Security and Innovation Fund to promote collaboration in planning and project management and to achieve common goals such as secure and reliable communication and lower costs for the purchase and maintenance of hardware and software. The enterprise IT investments enable HHS programs to carry-out their missions more securely and at a lower cost. Examples of HHS enterprise projects currently being funded are Enterprise E-mail, Network Modernization, and Public Key Infrastructure.

Research on Health Costs, Quality and Outcomes (HCQO)

	FY 2003 Actual	FY 2004 Enacted	FY 2005 Request	Increase or Decrease
Total BA PHS Eval	\$0	\$0	\$0	\$0
PHS Eval	(252,663,000)	(245,695,000)	(245,695,000)	+(0)
FTE	272	272	272	0

1. Purpose and Method of Operations

The purpose of the activities funded under the Research on Health Costs, Quality and Outcomes (HCQO) budget line is to support, conduct and disseminate research to improve the outcomes, quality, cost, use and accessibility of health care. Accordingly, the Agency has recently developed four main strategic goal areas:

Goal 1: Safety/Quality

- Goal 2: Effectiveness
- Goal 3: Efficiency
- Goal 4: Organizational Excellence

Over time, AHQR plans to provide detailed information about each strategic plan goal by a standard portfolio of work. The FY 2005 Request is AHRQ's first submission using the new strategic goal areas. At this point in time, AHRQ can only provide detailed reporting by one overarching portfolio of work. As the year progresses, AHRQ will move toward providing this information for each strategic plan goal.

2. Accomplishments and Performance Analysis by Portfolio of Work

AHRQ has made important strides toward meeting its strategic goals. This report reviews achievements of the Agency's established programs as well as activities initiated under the Agency's FY 2003 and FY 2004 budget. The information is broken by the following portfolios of work:

- Bioterrorism
- Data development
- Chronic care management
- Socio-economics of health care
- Informatics
- Long-term care
- Pharmaceutical outcomes
- Prevention
- Training
- Quality/safety of patient care
- Organizational support

Quality/Safety of Patient Care Portfolio

Reauthorization language in December 1999, states that the Director of AHRQ shall conduct and support research and build private-public partnerships to identify the causes of preventable health care errors and patient injury in health care delivery; develop, demonstrate, and evaluate strategies for reducing errors and improving patient safety; and disseminate such effective strategies throughout the health care industry. In response, AHRQ established the Center for Quality Improvement and Patient Safety (CQuIPS), concentrating in one organizational unit, the responsibility for planning, managing, and directing its patient safety program and addressing each of Congress' concerns.

AHRQ has successfully used existing research structures and networks to implement patient safety research, support the development of new networks, and fund the world's largest portfolio of patient safety research. AHRQ supports a growing network of researchers whose primary interest is in patient safety, and its training grants are expanding that foundation. It is also helping to develop recommendations for safe practices that healthcare organizations can use to reduce the risk of injury from health care harm and to improve the safety of care. Furthermore,

AHRQ has established a successful and active working relationship with a growing international network of patient safety researchers and program personnel.

Our longer term view is to continue to shift research from new development to adoption of effective patient safety practices. We are also investing in the development and implementation of information technology solutions to improve patient safety as well as the training of a cadre of leaders in the Patient Safety Improvement Corps (PSIC) who will serve as critical links in the uptake of important research findings. We are in the process of shifting the focus of our patient safety database activities to creating baselines from which to measure annual and long-term success.

A. Accomplishments - FY 2001 Patient Safety Investment Portfolio

In FY 2001, AHRQ invested \$50 million in new research grants, contracts, and other projects to reduce medical errors and improve patient safety. These projects will address key unanswered questions about when and how errors occur and provide science-based information on what patients, clinicians, hospital leaders, policymakers, and others can do to make the health care 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.

The results of investment in patient safety research are now being incorporated into practice. Below are examples of how this research is being used:

- AHRQ's Center for Education and Research in Therapeutics (CERTs) in the University of Arizona Health Sciences Center developed a unique educational and research tool at www.qtdrugs.org. This Web site contains a list of 72 drugs that can cause life-threatening abnormalities in heartbeats, or arrhythmia (abnormal heartbeat). Caregivers around the world can use this online resource to research specific drugs that might pose a risk to their patients, and they can submit clinical cases of drug-induced arrhythmias to the registry. Researchers are using the information submitted to develop profiles of people most at risk for drug-induced arrhythmia and to develop a genetic test that can identify them in advance of treatment.
- In partnership with the American Hospital Association (AHA) and the American Medical Association (AMA), AHRQ developed a new consumer tips sheet – 5 Steps to Safer Health Care. The posters and fact sheets, available in English and Spanish, offer evidence-based, practical tips on the role that patients can play to help improve the safety of the care that they receive.
- AHRQ research has provided information about 73 proven patient safety practices to health care administrators, medical directors, health professionals, and others who are responsible for patient safety programs. AHRQ research has also identified 11 other patient safety practices proven to work but not used routinely in the Nation's hospitals and nursing homes. Voluntary Hospitals of America and Premier, Inc. use the information to guide their member hospitals in selecting projects to improve safety. Many chief executive officers, medical directors, and hospital safety officers have reported that they use the information to help them initiate project to improve patient safety. For example, SSM HealthCare System, winner of the 2002 Malcolm Baldrige National Quality Award, used this report as a roadmap to develop their patient safety collaborative.

- To help patients assess the safety of their care, AHRQ, the Centers for Medicare & Medicaid Services (CMS), and other organizations supported the National Quality Forum (NQF), a not-for-profit membership organization created to develop and implement a national consensus for health care quality measurement and reporting. The NQF developed a list of serious, avoidable, adverse events that are so significant and so preventable that their occurrence should trigger an investigation of the organization in which they occurred. An example of such an event would be surgery on the wrong site. This list is now completed and available to the public. [For information on how to obtain a copy of Serious Reportable Events in Healthcare, go to the NQF's Web site (www.qualityforum.org) and click on "Activities/Consensus Reports" to find a description of the report, an executive summary, and ordering information for the full report.]
- AHRQ supported the NQF's effort to develop a list of safe practices proven to be
 effective in reducing harm to patients. The list, which soon will be available to the public,
 is a tool to identify and encourage practices to reduce errors and improve care. Hospitals
 will be encouraged to report on their use of these practices so that patients can
 determine what hospitals have done to improve safety of care.
- AHRQ supported the development of a new tool to help hospitals identify important
 patient safety problems, the Patient Safety Indicators (PSI's). Derived from readily
 available hospital discharge data, the PSI's and the user-friendly software developed to
 support their use, are already in use by many institutions.

B. Accomplishments – Patient Safety Database

On behalf of the HHS Patient Safety Task Force (PSTF), AHRQ signed a contract with The Keveric Company to begin the work to develop a new Patient Safety Database. The mission of the PSTF, which comprises AHRQ, CDC, CMS, and FDA, is to integrate existing data collection on medical errors and adverse events, to coordinate research and analysis efforts, and to collaborate on reducing the occurrence of injuries that result from medical errors. The goal of this project is to reduce regulatory burden and improve communication. In phase 1, Kevric will create web based reporting interface for hospital and institutional-based reporting of events to the CDC and FDA.

C. Accomplishments - Children and Patient Safety

AHRQ and the American Academy of Pediatrics (AAP) announced a partnership to help put valuable information about preventing medical errors into the hands of pediatricians and parents across the country. AHRQ and the AAP are working together to promote a new fact sheet called 20 Tips to Help Prevent Medical Errors in Children. It offers evidence-based, practical tips on avoiding medical errors related to prescription medicines, hospital stays, and surgery. AHRQ and AAP distributed copies of the fact sheet to AAP's 57,000 member pediatricians, as well as to groups representing children and parents.

D. Accomplishments – Morbidity and Mortality Rounds on the Web

AHRQ launched a monthly peer-reviewed, Web-based medical journal that showcases patient safety lessons drawn from actual cases of near misses (medical errors that result in no harm). Called AHRQ WebM&M (Morbidity and Mortality Rounds on the Web), the Web-based journal (http://webmm.ahrq.gov) was developed to educate health care providers about medical errors

in a blame-free environment. In July of this year, 20,235 unique visitor sessions were held. A total of 3,642 copies of the spotlight cases have been downloaded. The spotlight cases include significant details accompanied by a slide set useful for instruction.

E. Accomplishments – Medical Errors and Medicare Patients

AHRQ and the National Institute on Aging (NIA) sponsored a study showing that Medicare patients treated in the outpatient setting may suffer as many as 1.9 million drug-related injuries a year because of medical errors or adverse drug reactions not caused by errors. About 180,000 of these injuries are life-threatening or fatal, and more than half are preventable, say the researchers, who based the estimates on a study of over 30,000 Medicare enrollees followed during 1999-2000. Of note, this study was conducted in a private sector health plan with over 20 years experience providing care to Medicare beneficiaries.

F. FY 2005 PART Review

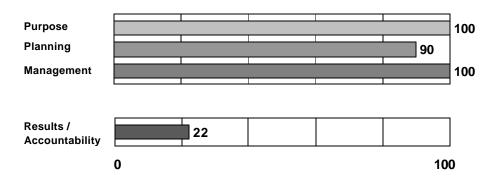
In FY 2005, OMB conducted a PART review of AHRQ's patient safety program. This review is provided on the following page. The PART analysis revealed the purpose and design of AHRQ's patient safety research portfolio are strong, but overall it lacks measurable performance results. The rating for this program was "adequate."

AHRQ acknowledges that the patient safety portfolio is relatively new and many grants first funded in FY 2001 have just recently completed their award cycle; therefore, identifiable and quantifiable results are not yet available. AHRQ has since adopted new long-term and annual performance goals that more accurately reflect the purpose of patient safety activities.

The FY 2005 Request totals \$84,000,000, an increase of \$4,500,000 over the FY 2004 Enacted level. In FY 2005 AHRQ will continue to work with our grantees on research findings from recently ended grants. The intent is to replicate, translate, and adopt research findings into real-world practice and assess their impact.

Program: Patient Safety

Agency: Department of Health and Human Services
Bureau: Agency for Healthcare Research and Quality



Key Performance Measures	Year	Target	Actual
Long-term Measure: Number of medical errors identified while decreasing the	2005	Estb baseline	
number of severe errors occurring	2010	Medl/ Severe	
Annual Measure: Percent of hospitals reporting on adverse events as standard practice	2003	Dvlp reprt	
	2004	Pilot 50 hosp.	
	2005	Analyze # & types	
Long-term Measure: Percent increase in the number of hospitals/providers using	2004	Deploy IT	
Computerized Physician Order Entry	2005	Estb baseline	
		+10%/ +50%	

Rating: Adequate

Program Type: Research & Development, Competitive Grant

Program Summary:

Agency for Healthcare Research and Quality (AHRQ) conducts and supports research to identify the causes of preventable health care errors and patient injury and to develop, demonstrate, and evaluate strategies for reducing these errors. AHRQ's efforts stem from findings by the Institute of Medicine that each year thousands of fatalities occur as a result of errors in the medical care patients receive. AHRQ's Patient Safety research portfolio includes grants to and contracts with domestic, public and private non-profit organizations that share this mission.

The PART analysis revealed the purpose and design of AHRQ's Patient Safety research portfolio are strong, but overall it lacks measurable performance results. In addition:

- The focus on Patient Safety addresses the specific and existing need for data on and to test techniques and technologies that could improve the day-to-day operation of the health care delivery system.
- AHRQ's Patient Safety portfolio is relatively new and many grants first funded in FY 2001 have recently completed their award cycle; therefore, identifiable and quantifiable results are not yet available.
- The program adopted new long-term and annual performance goals that more accurately reflect the purpose of Patient Safety activities.
- AHRQ coordinates and partners with its sister agencies, as well as other Departments to address national Patient Safety issues.

In response to these PART findings, the Administration will:

- Continue to urge AHRQ to request reports from grantees on research findings and the potential to replicate good models across the country.
- Monitor AHRQ's progress toward developing baselines for newly developed long-term and annual performance goals.

Program Funding Level (in millions of dollars)

2003 Actual	2004 Estimate	2005 Estimate	
55	80	84	

G. Performance Goals

Quality/Safety of Patient Care Portfolio					
Long Term Goal – By	Long Term Goal – By 2010, increase the # of medical errors identified while decreasing the				
Theme Performance Goal	# of severe errors. FY Targets	Actual Performance	Reference		
Identify the Threat By 2010, patient safety events reporting will be standard practice in 90% of hospitals nationwide. Outcome	FY 2005 Continue reporting on patient safety events and begin to analyze the number and types FY 2004 Pilot the system at 50 hospitals and begin reporting on patient safety adverse events FY 2003 Develop reporting mechanism and data structure through the National Patient Safety network	Completed	SG-1/5 HP-17		
Identify & Evaluate Effective Practices By 2010, double the # of patient safety practices that have sufficient evidence available and are ready for implementation. (use the EPC report for baseline data) Outcome	FY 2005 5 health care organizations/units of state/local governments will evaluate the impact of their patient safety best practices interventions FY 2004 6 health facilities or regional initiatives to implement interventions and service models on patient safety improvements will be in place FY 2003 Awards to be made to at least 6 facilities or initiatives	Completed	SG-1/5 HP-17		
Educate, Disseminate, and Implement to Enhance Patient Safety By 2010, successfully deploy hospital practices such that medical errors are reduced nationwide.	FY 2005 15 additional states or major health care systems will have on-site experts in Patient Safety. FY 2004 10 States or major health care systems will have trained through the PSIC program 5 health care organizations or units of state/local government will implement evidence-based proven safe practices FY 2003		SG-1/5 HP-17		

	Quality/Safety of Patient Care Portfolio				
Long Term Goal – B	y 2010, increase the # of medical error	s identified while ded	reasing the		
	# of severe errors.				
Theme	FY Targets	Actual	Reference		
Performance Goal		Performance			
	Establish a Patient Safety Improvement Corp (PSIC) training program Award to 5 health care organizations or units of state/local government grants to implement evidence-based proven safety practices. FY 2002 Planning study	Completed Conducted the Patient Safety Improvement Corp planning study			

Data Development Portfolio

Within HCQO, the data development portfolio includes two main components: the Health Care Utilization Program and the Consumer Assessment of Health Plans.

Health Care Utilization Program (HCUP). HCUP is a Federal-State-industry partnership to build a standardized, multi-State health data system. This long-standing collaborative endeavor has built and continues to develop and expand a family of databases and powerful, user-friendly software to enhance the use of administrative data.

The HCUP family of databases currently includes:

- State Inpatient Databases (SID).
- Nationwide Inpatient Sample (NIS).
- State Ambulatory Surgery Databases (SASD).
- State Emergency Department Databases (SEDD).
- Kids' Inpatient Database (KID).

HCUP includes data on hospital discharges from participating States, as well as a nationwide sample of discharges from community hospitals. AHRQ has expanded HCUP beyond inpatient hospital settings to include hospital-based ambulatory surgical facilities, and a pilot effort is underway to capture information from emergency department databases.

Data from HCUP have been used to produce reports that answer questions on reasons Americans are hospitalized, how long they stay in the hospital, the procedures they undergo, how specific conditions are treated in hospitals, charges incurred for hospital stays, and resulting outcomes.

AHRQ has made available the Kids' Inpatient Database (KID), the Nation's first comprehensive database on hospital use, charges, and outcomes focused exclusively on children and adolescents. The KID contains 1.9 million pediatric discharges representing 6.7 million pediatric discharges nationwide and data on various hospital characteristics such as region, location (urban/rural), bed size, ownership, teaching status, and children's hospital status.

A. Accomplishments – HCUP

One of HCUP's goals is to increase the number of States participating in HCUP; 33 States are HCUP partners. Four new State partners joined HCUP in FY 2003: Minnesota, Nebraska, Rhode Island, and Vermont. They were selected based on the diversity—in terms of geographic representation and population ethnicity—they bring to the project, along with data quality performance and their ability to facilitate timely processing of data.

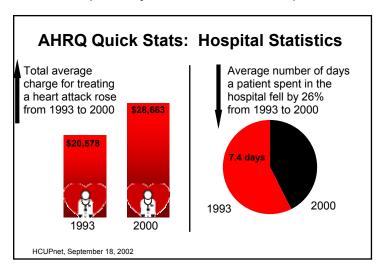
The number of States now participating in the State Ambulatory Surgery Databases (SASD), a second group of HCUP databases, increased from 13 in FY 2001 and 15 in FY 2002 to 18 in FY 2003.

The number of States participating in the State Emergency Department Databases (SEDD) also increased from 5 in FY 2001 and 7 in FY 2002 to 9 in FY 2003.

During the past year AHRQ implemented a multifaceted effort to make HCUP data more accessible to researchers and other interested users. HCUP tools include:

 HCUPnet at http://www.ahcpr.gov/data/hcup/hcupnet.htm. HCUPnet is a free, interactive, menu-driven online service that allows easy access to national statistics and trends and selected State statistics about hospital stays. HCUPnet answers questions

about conditions treated and procedures performed in hospitals for the population as a whole, as well as for subsets of the population such as children and the elderly. In addition, two new States for a total of 18 States have agreed to include their data in HCUPnet. At 6,000 plus visits a month, HCUPnet is consistently within the Top 10 resources accessed from the AHRQ Web site. The site is updated continuously throughout the year. We also update as States agree to join.



- HCUP Central Distributor. Researchers' access to HCUP data has been facilitated by
 the creation of a central distribution center for the State-level databases. Now
 researchers can go one-stop shopping instead of contacting each State on an individual
 basis. We have increased the number of States providing data to the Central Distributor
 to 18.
- HCUP fact books. Data from HCUP have been used to produce reports that answer questions on reasons Americans are hospitalized, how long they stay in the hospital, the procedures they undergo, how specific conditions are treated in hospitals, the resulting outcomes, and how hospital care for women differs from care for men. In FY 2003, a new fact book is being developed on potentially avoidable hospitalizations. This fact book will describe ambulatory care sensitive conditions conditions that evidence suggests may have been avoided through timely and effective ambulatory care. The fact book will use graphs and tables to describe these conditions, including priority conditions such as asthma, diabetes, congestive heart failure, hypertension, and low birth weight infants. In addition, this report will assess quality from the perspective of access to health care services for select subgroups of the US population: children, elderly, women, low-income, and rural residents.

B. Performance-based Improvements – HCUP

The FY 2004 Enacted provides \$2,000,000 for performance-based improvements for HCUP. These funds will allow AHRQ to improve availability of the data itself, make it more usable, and facilitate effective use. By 2010, AHRQ has committed to achieving five outcomes goals for its HCUP and HCUP Quality Indicators (QI) programs. Specifically, at least 5 organizations will use HCUP databases, products, or tools to improve health care quality for their constituencies by 5

percent as defined by the AHRQ Quality Indicators (e.g., 5 percent reduction in preventable hospitalizations, complication rates, or mortality rates; 5 percent increase in use of superior technology).

Expand and Improve Outpatient Data

Standardized, sophisticated emergency department and other outpatient data collections are precursors to assessing, benchmarking and ultimately improving the quality of health care in these settings. Fewer than half of the states collect statewide emergency department data, and collection of data from most other outpatient data sites is very rare. In FY 2004, the HCUP program will expand and improve this data through several strategies such as organizing workshops for state data organizations, providing technical assistance, and developing and disseminating best practice models for states to use in standardizing, expanding and improving these data.

Make HCUP Data and Quality Indicators (QI) More Usable

Hospitals, states, employers, community groups and others who seek to make quality improvement efforts generally do not have the research staff or analytic capacity to work with raw data and measures. HCUP, in 2004, we will make both the data and the quality measures more usable:

- For the HCUP data, we will create user-friendly software programs, templates, and analytic tools that states, employers, community groups and others can use to translate HCUP data into meaningful, actionable information. For example, we will develop software and templates for briefs analyzing HCUP data by clinical diagnosis, by geographic area, by special population, by race, etc.
- For the QIs, we will act on feedback from the early wave of QI users, and incorporate technical enhancements to make the QI software more user-friendly. For example, AHRQ will provide benchmarks for different categories of hospital user groups and payer groups so that key user groups more readily can see how their own performance compares to that of their relevant peer group. AHRQ also will develop hospital report card templates to guide how the QIs are communicated to the public at large as well as to special populations such as the elderly. In addition, AHRQ will develop user friendly software as a companion to the set of QI indicators to facilitate increased use of QIs so that users will no longer be required to purchase SPSS or SAS software as currently is the case.

Facilitate Effective Use through Technical Assistance and Outreach

To achieve our quality improvement goals, stakeholders must not only use the HCUP data and Quality Indicators, but use them well and effectively. To this end, the QI program will increase technical assistance to a targeted group of critical QI users, particularly hospitals, state health departments and activist employers. AHRQ will convene series of national and regional workshops for QI users and potential QI users to identify and address implementation issues, instruct on QI use, and take first steps in setting the stage for the 2010 impacts.

Consumer Assessment of Health Plans (CAHPS®). CAHPS® is an easy-to-use kit of survey and reporting tools that provides reliable information to help consumers and purchasers assess and choose among health plans, providers, hospitals and other health facilities. Since its beginning in 1995, the CAHPS team has produced survey and reporting products for:

- Commercial populations (managed care and fee for service plans),
- Medicare recipients (managed care, fee for service and disenrollees from plans,
- · Children with special health care needs,
- State Medicaid programs.

CAHPS® will also allow health plans and purchasers to assess and track areas for quality improvement. Information from CAHPS® surveys was available to help more than 123 million Americans with their 2003 health care benefits decisions.

The CAHPS® team and AHRQ work closely with the health care industry and consumers to ensure that the CAHPS® tools are useful to both individual consumers and to employers and other institutional purchasers of health plans. Collaborations include the following:

- In the past couple of years, the CAHPS team had worked together with the California Health Care Foundation and the Pacific Business Group on Health to develop and test a version of CAHPS through which consumers could rate the care they receive via physicians in group practice. We are currently developing a version of CAHPS through which individuals can assess care received from individual providers.
- AHRQ and CMS are collaborating in the development of a CAHPS® survey to obtain consumers' assessments of health care and services received in nursing homes. Survey development and sampling and data collection procedures were completed in FY 2002.
- In 2002, CMS requested that the CAHPS team develop and test an instrument through which patients can assess the care they receive in hospitals. Since this standardized tool enables hospital-to-hospital comparisons using the same criteria, CMS plans to publish the results on their website to assist people in selecting a high-quality hospital. As of June 2003, the CAHPS team has developed and cognitively tested a draft survey, sought input about the survey from various stakeholder groups (hospitals, data collection vendors and others) and incorporated changes in the instrument based on feedback from these groups. The instrument is now undergoing pilot testing in three states (New York, Arizona and Maryland). The CAHPS team is also beginning to develop and test both text and data displays to be disseminated via CMS's "Medicare Compare" website.
- In 2002, the CAHPS team, in collaboration with the National Institute on Disability and Rehabilitation Research (NIDRR), the Centers for Disease Control and Prevention, and the National Rehabilitation Hospital Center for Health and Disability Research, began development for a version of CAHPS to assess care given to people with mobility impairments (PWMI). We have clarified goals for this effort, specified the target audience and spelled out uses for the resulting data. Thus far, we have developed a draft screener through which to identify members of the target population and are searching for sources of data through which to test it. We are also beginning to identify content to guide development of items for the questionnaire itself.
- At the request of CMS, the CAHPS team is also working on a questionnaire through which end stage renal disease (ESRD) patients can rate the facilities through which they

receive dialysis.

C. CAHPS® II

In 2002, AHRQ funded three grants submitted under the CAHPS® II request for applications for \$2.5 million. CAHPS® II will focus on development and testing of new and more effective ways to report quality data to consumers, patients, caregivers, and purchasers. It will also permit translation of the questionnaires and reports into Spanish and other languages. CAHPS includes the development of assessment instruments for people with mobility impairments and more refined questionnaire items for people who receive care through preferred provider organizations. The team will also work with caregivers and plans to use CAHPS® data for the purpose of quality improvement. An additional component of CAHPS II involves close collaboration with CMS and the private sector to develop and implement a single tool to assess and report patient's experiences of hospital care.

D. Performance-based Improvements - CAHPS®

The FY 2004 Enacted provides \$1,000,000 for performance-based improvements for CAHPS®. These funds will address two areas: a program impact evaluation and technical assistance.

Program Impact Evaluation

Since its inception in I997, the CAHPS® project has consistently used public comment and outside expert review to shape the program's development, develop, test, and revise products, and make recommendations regarding the program's direction. There is a need to assess the impact of the program from the perspective of a variety of audiences: consumers, health care providers, and purchasers. Award funds would be used to conduct such an evaluation via a contract with an outside organization experienced in the area of impact evaluation. The final analysis of the evaluation data will be useful in identifying areas of strength, as well as those project components that might need to be revised and/or terminated. Maintenance of this impact evaluation effort could be built into the scope of work for the Survey User Network (SUN) contract, a five year contract, currently held by Westat, which provides support and technical assistance to CAHPS® users, including the CAHPS® II grantees.

Technical Assistance

Funds would also be used to enhance the services currently provided by the Survey Users Network (SUN), including the work that will be necessary to formalize the program impact evaluation. Technical assistance needs are expected to increase substantially in FY 2004 due to a new Hospital CAHPS® program and will require the development and dissemination of new products for new sets of audiences, including hospitals and ambulatory care services. These functions will have substantial resource and staffing implications for the support contractor.

E. Performance Goals

Data Development Portfolio			
Performance Goal	FY Targets	Actual	Reference
		Performance	
By 2010, at least 5 organizations will use HCUP databases, products or tools to improve health care quality for their constituencies by 5%, as defined by the AHRQ Quality Indicators Outcome	FY 2005 Two new organizations will use HCUP/QIs to assess potential areas of quality improvement, and at least one will develop and implement an intervention based on the QIs. FY 2004 Two new organizations will use HCUP/QIs to assess potential areas of quality improvement, and at least one will develop and implement an intervention based on the QIs. FY 2003 Two organizations will use HCUP/QIs	Completed	SG-4/5 HP-23
	to assess potential areas of quality improvement	Completed	
Increase the number of partners contributing data to the HCUP databases by 5% above FY2000 baseline	FY 2005 Increase the number of partners contributing outpatient data to the HCUP databases. FY 2004 5% increase over FY00 baseline FY 2003		SG-4/5 HP-23
Efficiency	Increase the number of partners required	Completed	
By 2008, CAHPS® data will be more easily available to the user community and the number of consumers who use information from CAHPS® to make choices about their healthcare will increase by 20%. (Baseline FY 2002)	Establish baseline for number of hospitals collecting HCAHPS data. FY 2004 Produce a CAHPS questionnaire for consumer assessment of hospital quality. Establish baseline for number of hospitals collecting HCAHPS data. FY 2003 Produce a CAHPS® module for consumer assessments of care received in nursing home settings	Completed	SG-3/4/5/6 HP-23
	FY 2002 Obtain baseline number of people with access to CAHPS® data	Baseline developed: Access – 90 million	

	Americans	

Chronic Care Management Portfolio

In AHRQ's 1999 reauthorization legislation (PL #106-129), Congress directed that the Agency produce, on behalf of DHHS, an annual report on the state of the Nation's health care quality, beginning in 2003. This first report provides a general picture of the state of health care quality for the entire country. It focuses on a select set of national priority conditions, attached to a limited set of core measures supported by a broad consensus among key stakeholders, and uses data collected at the national and state level from a variety of publicly accessible sources to track those conditions. In so doing, it synthesizes the overwhelming amount of health care quality information regularly reported by the media for policymakers, providers and consumers, consolidating diverse information in one place.

The congressional mandate to produce the National Healthcare Quality Report (NHQR) specified neither which conditions should be included in the report, nor how those conditions should be identified. The AHRQ contracted with the IOM (Institute of Medicine) to create a conceptual framework that would guide the identification and selection of priority conditions. The IOM framework consists of a matrix with the columns as dimensions of care (effectiveness, safety, timeliness, patient centeredness and equity) and the rows as patient needs (staying healthy, getting better, living with illness or disability, and coping with the end of life). AHRQ formed an Interagency Workgroup to populate the framework with priority conditions and with measures of quality for those conditions. The basis for priority conditions in the first NHQR is Healthy People 2010; in addition, where relevant measures used are identical to those used by CMS (e.g., nursing homes, home health, items from CAHPS) and other accreditation organizations. Priority conditions in the report include: cancer, chronic kidney disease, diabetes, heart disease, HIV/AIDS, maternal and child health, mental illness—depression, respiratory disease, nursing home and home health.

A. Accomplishments – Diabetes

An AHRQ study found that patients with both adult-onset (type 2) diabetes and other chronic conditions can still achieve good blood sugar control if they receive intensive therapy at a specialty diabetes clinic. Therapy included adding or changing oral medications or adding insulin to the treatment regimen.

B. Accomplishments -- Heart Disease

AHRQ-supported research found that patients who take beta-blockers (drugs to slow the heart rate and reduce contractions of the heart muscle) prior to bypass surgery appear to have improved survival and fewer complications during and after the procedure. Researchers indicate that up to 1,000 lives potentially could be saved each year by giving patients beta-blockers before bypass surgery.

C. Accomplishments – National Healthcare Quality Report (NHQR)

On December 22, 2003 AHRQ released the National Healthcare Quality Report (NHQR) and the National Healthcare Disparities Report (NHQR). These two reports represent the first national comprehensive effort to measure the quality of health care in America and differences in access to health care services for priority populations. The reports provide baseline views of

the quality of health care and differences in use of the services. Future reports will help the nation make continuous improvements by tracking quality through a consistent set of measures that will be updated as new measures and data become available.

The reports present data on the quality of, and differences in the access to, services for seven clinical conditions, including cancer, diabetes, end-stage renal disease, heart disease, HIV and AIDS, mental health, and respiratory disease. The reports also include data on maternal and child health, nursing home and home health care, and patient safety.

The measures included in the reports provide an important snapshot of the American health care system. The National Healthcare Quality Report offers hopeful signs in many areas. For example:

- The majority of women are screened for breast cancer (70 percent of women over 40 within the past two years) and cervical cancer (81 percent of women 18 and over within the past three years).
- Almost 90 percent of in-center kidney dialysis patients get adequate dialysis.
- Approximately 83 percent of women have prenatal care in their first trimester.
- Over 80 percent of Medicare enrollees hospitalized with pneumonia get blood cultures before they are given an antibiotic, get their initial antibiotic within 8 hours, and get the type of antibiotics they need consistent with current clinical guidelines.

The report also indicates that greater improvement in health care quality is possible. For example:

- Rates of children who are admitted to the hospital for asthma are 29.5 per 10,000.
- Only about 20 percent of patients prescribed a medication to treat diagnosed depression have at least 3 recommended follow up visits to monitor their medication in the 12 weeks after diagnosis.
- Sixty-two percent of smokers who had a routine office visit reported that their doctors had advised them to quit. At the same time, less than half of acute heart attack patients who smoke are counseled to quit while in the hospital (42 percent).
- Rates for blood pressure screening are 90 percent, and rates for cholesterol screening in adults 45 or older are more than 80 percent. However, only about 25 percent of people with high blood pressure have it under control.

D. Performance Goals

Chronic Care Management Portfolio			
Performance Goal	FY Targets	Actual Performance	Reference
5 0010		renomiance	00.4/5
By 2010, evidence,	FY 2005		SG-1/5
translation tools and	Reduce by an additional 5%:		HP-3/4/5/
implementation	 the rate of hospitalizations for 		12/13/14/
strategies exist for	pediatric asthma in persons		16/21/24
improving the overall	under age 18.		
quality and safety of	 the number of admissions for 		
health of the	immunizations-preventable		

Chronic Care Management Portfolio			
Performance Goal	FY Targets	Actual	Reference
American public so that: By 2010, reduce to 105,613 admissions, the rate of hospitalizations for pediatric asthma in persons under age 18. By 2010, reduce to 520,441 the number of immunization-preventable pneumonia hospital admissions of persons aged 65 and older. By 2010, reduce to 11,570 the number of immunization-preventable influenza hospital admissions of persons aged 65 and older.	pneumonia for persons aged 65 or older. • the number of admissions for immunization-preventable influenza for persons aged 65 or older. FY 2004 Reduce by 5% below the baseline: • the rate of hospitalizations for pediatric asthma in persons under age 18. • the number of admissions for immunization-preventable pneumonia for persons aged 65 or older. • the number of admissions for immunization-preventable influenza for persons aged 65 or older. • the number of admissions for immunization-preventable influenza for persons aged 65 or older. FY 2003 Establish Validated Baselines Following are FY 2000 baseline estimates: Pediatric Asthma – 150,877 Pneumonia – 743,487 Influenza – 16,529	Completed	
Outcome Report on national	FY 2005		SG-1/5
trends in health care quality	Establish trends in National Quality Report categories		HP-3/4/5/ 12/13/14/ 16/21/24
	FY 2004 Report on progress in core measure set. Identify private sector data to be used in future reports.		
	FY 2003 Produce first annual quality report. Establish baseline data in core set of	Completed - National Quality Report Published	

Chronic Care Management Portfolio			
Performance Goal	FY Targets	Actual Performance	Reference
	measures		

Informatics Portfolio

Despite promises of reduced costs and improved quality, physicians, hospitals and other healthcare facilities have lagged behind other industries in their adoption of information technologies (IT). Among other factors, the implementation of health care information technologies has been hindered by payment systems that fail to reward information technology investments and associated quality improvements, the fragmentation of the health care industry, the absence of industry standards, resistance by clinicians to change practice patterns, the failure of many technology companies to perform at promised levels and appreciable upfront IT investment costs.

There are however a number of encouraging signs. Pressure on providers to respond to external forces and to invest in, e.g., computerized prescription order entry (CPOE) systems in response to state legislative mandates and employer activities should result in broader adoption of technologies that improve patient safety and health care industry efficiency. Studies of providers' findings regarding integrating clinical IT into their practices and analyses of emerging Internet disease management and other applications will also bring the health care industry closer to an understanding of IT's benefits; this evidence is critical to overcome inertia and resistance to change in a highly fragmented sector of the economy.

To encourage the health care industry's progress, health services research is needed to understand both the factors that influence adoption of emerging health care information technologies among various types of providers and health care systems as well as the costs and organizational and system challenges associated with implementing new applications. Most generally, the Agency is therefore working to understand better IT application in the health care delivery setting as well as uptake and performance trends related to health care providers' use of emerging information technology.

A. Sample of Information Technology Projects

Improving Primary Care Patient Safety with Handheld DSS: We are currently funding two projects that are studying the use of handheld Computerized Physician Order Entry (CPOE) systems with decision support in primary care clinics. The studies are evaluating the impact of these systems on reducing medical errors and improving clinical care. They are also assessing the barriers to use of these systems and the cost-effectiveness of using this technology.

<u>Using Handheld Technology to Reduce Errors in ADHD Care:</u> This project is using a handheld CPOE system with decision support to reduce medical errors and improve the management of attention-deficit/hyperactivity disorder (ADHD) in children.

Impact of EpicCare on the Mgmt. of Diabetes in the Geisinger Health System: This project is using an electronic medical record system with CPOE and automated clinical reminders to improve the quality of diabetes care.

<u>The Effect of Using Rules Technology with Provider Order Entry in Medication Error Reduction:</u>
<u>This project is evaluating the impact of a CPOE with decision support on reducing medication errors and preventing adverse drug events. The CPOE system will trigger automatic warnings that assist providers in detecting and preventing potential adverse drug events when they are ordering medications in both the inpatient and outpatient setting. Potential problems will be</u>

identified using algorithms that link information from the laboratory, pharmacy, and medical records. They are also assessing barriers to use of CPOE, physician adherence to the recommendations, and physician satisfaction with the system.

Improving Quality with Outpatient Decision Support: This project is studying the impact of an electronic medical record system with CPOE and automated reminders on quality of care in outpatient clinics setting and assessing physician compliance with guidelines, reminders, and alerts. Areas being studied include chronic disease management, medication management, and the use of ancillary tests.

<u>Impact of Electronic Prescribing on Medication Errors:</u> This project is studying the impact of a handheld CPOE system on prescribing practices and medication error rates in an urban pediatric clinic and in the emergency department.

<u>HIV Treatment Error Reduction Using a Genotype Database:</u> This project is evaluating an electronic medical record system with CPOE and automated decision support that integrates an individual patient's HIV genotype information with the patient's medication information. The study will evaluate the impact of the system on the selection of antiretroviral drug medications, prescribing errors, the development of drug resistance, and overall quality of care.

The Use of Encoded Guidelines in an Electronic Medical Record System for Targeted Tuberculin Testing and Treatment of Latent Tuberculosis: This project is studying the use of a CPOE system to identify patients at increased risk for tuberculosis infection and the effectiveness of the rules and alerts in improving adherence to the screening guidelines.

B. FY 2004 Patient Safety Health Care Information Technology Program

In FY 2005, AHRQ will continue funding of \$49,886,000 for the Patient Safety Health Care Information Technology program begun in FY 2004. The program will support a variety of activities aimed at improving health care quality and patient safety by promoting and accelerating the development, adoption and diffusion of interoperable information technology in a range of health care settings. This program will include a special focus on small and rural hospitals and other providers, which will help assure that these hospitals can implement and use interoperable IT to support improvements in health care quality and patient safety. Funds also will be used to support innovative research and demonstration projects that will improve health care quality and patient safety in a wide variety of health care settings, as well as State or regional implementation grants to begin demonstrating and testing the feasibility of interoperable information exchange among health care settings. Funding for the Patient Safety Health Care Information Technology program will continue into FY 2005.

The FY 2005 Request also continues \$10,000,000 in contracts for the joint ASPE - AHRQ program begun in FY 2004 to accelerate and promote the development, adoption and availability of interoperable clinical data standards and technology, including message format and vocabulary standards, to support interoperable data exchange in health care.

C. Accomplishments - Web-based Patient Safety Indicators

AHRQ has developed the Patient Safety Indicators (PSIs), a new Web-based tool that can help hospitals enhance their patient safety performance by quickly detecting potential medical errors in patients who have undergone medical or surgical care. Hospitals then investigate to

determine whether the problems detected were caused by potentially preventable medical errors or have some other explanations. The PSIs were used to analyze the occurrence of errors during hospitalization.

D. Performance Goals

Informatics Portfolio			
Performance Goal	FY Targets	Actual Performance	Reference
By 2008, increase the # of hospitals using Computerized Physician Order Entry (CPOE) by 10 percent.	FY 2005 X hospitals using CPOE		SG-1/5 HP-11/23
By 2008, in hospitals funded for CPOE systems, increase the # of providers using the system from none to over 50 percent.	FY 2005 X providers using CPOE		SG-1/5 HP-11/23
By 2008, in hospitals funded for CPOE, maintain a lowered medication error rate.	FY 2005 Increase the rate of detection by 100 percent		SG-1/5 HP-11/23
Outcome By 2006, six national message format and clinical vocabulary standards will be identified/recommen ded by HHS as ready for voluntary adoption and deployment.	FY 2004 3 message format and clinical vocabulary standards will be recommended by HHS as ready for voluntary adoption and deployment FY 2003 Develop Consensus on standards	Completed	SG-1/5 HP-11/23
By 2008, nursing homes will have evidence-based information needed to make informed purchasing strategies related to IT Outcome	FY 2004 5 technologies currently shown to be effective in other clinical settings will be tested in nursing homes to evaluate the impact on safety, quality and cost of care		SG-1/5 HP-11/23

Prevention Portfolio

Clinical prevention is the focus of the Agency's disease prevention research portfolio. Namely, those preventions interventions and services provided in a clinical setting between physician and patient, such as screening tests and/or counseling. AHRQ's clinical prevention program is based primarily on the activities of the U.S. Preventive Services Task Force and its implementation arm, the Put Prevention Into Practice (PPIP) program. The Task Force is an independent panel of private-sector experts in prevention and primary care. It conducts rigorous scientific assessments of the effectiveness of a broad range of clinical preventive services, including screening tests, chemoprevention, immunizations, and counseling. The PPIP program targets providers and patients using tools and resources that enable doctors and other health care professionals to determine what preventive services patients should receive as well as enable patients to more easily understand and keep track of their preventive care.

A. Accomplishments - U.S. Preventive Services Task Force

In 2002, the third Task Force issued the following recommendations covering colorectal cancer, osteoporosis, hormone replacement therapy, depression, chemoprevention, and breast cancer.

Colorectal cancer: The Task Force in its strongest ever recommendation for colorectal cancer screening urges that all adults age 50 and over get screened for the disease, the nation's second leading cause of cancer deaths. Various screening tests are available, making it possible for patients and their doctors to decide which test is most appropriate for each individual. Although each of these tests is effective in diagnosing colorectal cancer at an early stage when it is treatable, the Task Force noted that there is no single best test for all patients. Options include at-home fecal occult blood test (FOBS); flexible sigmoidoscopy; a combine of home FOBT and flexible sigmoidoscopy; colonoscopy; and double-contrast barium enema. Screening can also lead to early detection of adenomatous polyps--precancerous growths that can be removed to prevent them from progressing to cancer.

Osteoporosis: The Task Force recommends that women aged 65 and older be screened routinely for osteoporosis, and that women at high risk for fractures begin screening at age 60. Women are at greater risk for osteoporosis than men because women's bones are less dense than mens' bones. The Task Force found good evidence that the risk for osteoporosis and fracture increases with age and other factors, that bone density measurements accurately predict the risk for fractures in the short-term, and that treating women with no symptoms of osteoporosis reduces their risk for fracture. Other risk factors cited include lower body weight and no current use of estrogen. The Task Force concludes that the benefits of screening and treatment are of at least moderate magnitude for women at increased risk by virtue of age or presence of other risk factors.

<u>Hormone replacement therapy:</u> The Task Force recommends against the use of combined estrogen and progestin therapy for preventing cardiovascular disease and other chronic conditions in postmenopausal women; they also recommend that women considering whether to start or continue hormone therapy to relieve menopausal symptoms discuss their individual risks for specific chronic conditions and personal preferences with their clinician. Although the Task Force found evidence for both benefits and harms of combined estrogen and progestin therapy— one of the most commonly prescribed hormone regimens— they conclude that harmful

effects of the combined therapy are likely to exceed the chronic disease prevention benefits for most women. The Task Force concludes that combined hormone therapy could increase bone mineral density and reduce the risk of fractures, and may reduce the risk of colorectal cancer. They also found equally strong evidence, however, that this therapy increases the risk for breast cancer, blood clots, stroke, and gallbladder disease, and that this therapy does not reduce the risk of heart disease but actually increases the risk of heart attacks. An estimated 14 million American women take hormone therapy.

<u>Depression:</u> The Task Force indicates that clinicians can identify up to 90 percent of people who suffer from major depression by asking all patients they see two simple questions. The questions are: "Over the past two weeks, have you felt down, depressed or hopeless?" and "Over the past two weeks, have you felt little interest or pleasure in doing things?" This recommendation is the latest sign of the growing recognition that depression is one of the most common--and most commonly undiagnosed and untreated--chronic illnesses. About 19 million American adults suffer from depression, and estimates suggest that as many as two-thirds do not get treatment. This recommendation could bring many of these people into treatment and add millions to the numbers who are taking antidepressants such as Prozac. The Task Force adds that screening is only the first step--patients must have access to the right therapy and medicines, and health care systems must encourage patient followup care by clinicians.

<u>Chemoprevention-heart disease:</u> The Task Force strongly recommends that clinicians discuss aspirin chemoprevention with adults who are at increased risk for coronary heart disease. Discussion with patients should address both the potential benefits and harms of aspirin therapy.

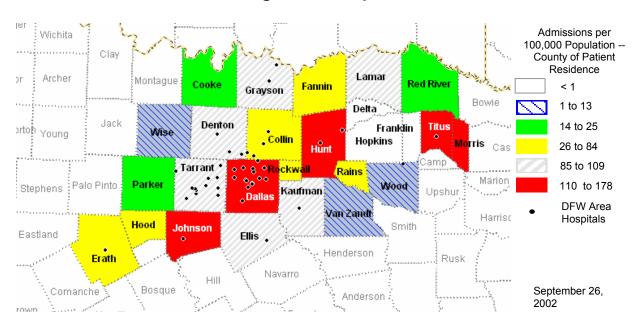
<u>Chemoprevention of breast cancer:</u> The Task Force recommends that clinicians discuss the potential benefits and risks of taking prescription medicines such as tamoxifen to reduce the risk of breast cancer with their female patients who are at high risk for the disease. Women are considered at high risk if they are over 40 and have a family history of breast cancer in a mother, sister, or daughter, or have a history of abnormal cells on a breast biopsy. The Task Force also recommends against the use of these drugs by women at low or average risk for breast cancer because the harmful side effects may outweigh the potential benefits. Those side effects can include hot flashes, increased risk for blood clots in the legs or lungs, and increased risk for endometrial cancer.

Breast cancer: The Task Force recommends that women aged 40 and older have a mammogram with or without clinical beast examination every 1-2 years. They found fair evidence that mammography screening every 1-2 years could reduce breast cancer mortality by approximately 20 percent to 25 percent over 10 years. The evidence is strongest for women between the ages of 50 and 69, but the Task Force concludes benefits were likely to extend to women 40-49 as well. The Task Force published two earlier breast cancer screening recommendations, in 1989 and 1996, that both endorsed mammography for women over age 50. The Task Force is now extending that recommendation to all women over age 40, even though the strongest evidence of benefit and reduced mortality from breast cancer is among women ages 50-69. This recommendation acknowledges that there are some risks associated with mammography (e.g., false-positive results that lead to unnecessary biopsies or surgery), but that these risks lessen as women get older.

B. Accomplishments - Prevention Quality Indicators

AHRQ launched a new Quality Indicator module. The Prevention Quality Indicators – a software tool for detecting potentially avoidable hospital admissions for illnesses (e.g., diabetes) which can be effectively treated with high-quality, community-based primary care. The AHRQ Prevention Quality Indicators allows users to measure and track hospital admissions for 16 conditions using their own hospital discharge data and will provide the information needed to improve the quality of primary care for these illnesses in a community or state. The Dallas-Fort Worth Hospital Council (DFWHC) is a metropolitan hospital association representing hospitals in north Texas. The DFWHC Data effort was established in 1997 to answer the growing need in the health care community for high quality, standardized data which could be used to measure value, facilitate evaluation of health care quality, and promote quality improvements. In an evaluation of hospital discharge data collected from 63 hospitals in north Texas, diabetes was found to be one of the top ten reasons for hospitalization. The Data effort used the AHRQ Prevention Quality Indicators (PQIs) to identify potential variances across geographic regions. The graphic below provides a visual representation of county-by-county variances found for admission rates specific to diabetes (long term complications.)

Variation in Admission Rates in North Texas for Prevention Quality Indicator: Diabetes – Long Term Complications



Dallas-Fort Worth Hospital Council -- Data Initiative -- 2000 Hospital Discharge Data

C. Performance Goals

Prevention Portfolio			
Performance Goal	FY Targets	Actual Performance	Reference
Increase the awareness and knowledge of recommended clinical preventive services Outcome	FY 2005 Publish and market revised editions of guide for adults and seniors FY 2004 Produce fact sheets for adolescents, seniors, children. Partner with appropriate professional societies and advocacy groups		SG-1/5 HP-13/14/ 15/16/18/ 19/21/22/ 24/25/27
Improve the quality and quantity of preventive care delivered in the clinical setting for the patient population Outcome	FY 2005 Produce fact sheets for adolescents, seniors, children. Partner with appropriate professional societies and advocacy groups FY 2004 Increase CME activities by developing a Train the Trainer program for implementing a system to increase delivery of clinical preventive services		SG-1/5 HP-13/14/ 15/16/18/ 19/21/22/ 24/25/27
Keep pace with emerging science and technology in relation to the development of recommendations and to their implementation Outcome	FY 2005 Add another 6-10 Electronic Medical Record vendors as active partners FY 2004 Finalize Personal Digital Assistant software program so that Task Force recommendations can be downloaded from AHRQ's website		SG-1/5 HP-13/14/ 15/16/18/ 19/21/22/ 24/25/27
Validate best practices and evaluate Put Prevention into Practice (PPIP) and its resources	FY 2005 Establish a national resource center to assist public and private sector partners in -sharing best practices -evaluating which approaches work -measuring impact FY 2004 Benchmark best practices for delivering clinical preventive services		SG-1/5 HP-13/14/ 15/16/18/ 19/21/22/ 24/25/27

Socio-economics of Health Care Portfolio

The program on financing, access, cost and coverage conducts, supports and manages studies of the cost and financing of health care, the access to health care services and related trends. These studies and data development activities are designed to provide health care leaders and policymakers with the information and tools they need to improve decisions on health care financing, access, coverage and cost. The program is responsible for understanding the dynamics of consumer, employer, and provider behavior as well as the factors underlying trends in the areas of health care costs, use and access. To fulfill this mission, the program conducts and sponsors descriptive and behavioral analyses of the U.S. health care system including the population's access to, use of, and expenditures and sources of payment for health care; the availability and costs of private health insurance in the employment-related and non-group markets; the population enrolled in public health insurance coverage and those without health care coverage; and the role of health status in health care use, expenditures, and household decision making, and in health insurance and employment choices. Much of this research is informed by the development of analytical databases from the Medical Expenditure Panel Survey (MEPS). In addition, the program conducts and sponsors research and the development of models and data bases to support micro-simulation analyses of the impact on individuals and households of current and proposed changes in health care policy. Analyses focus on the impacts of health policies embodied in current law and on health care policies embodied in generic versions of proposed reforms. The end goal of the program is to provide health care leaders and policy makers with the information and tools they need to improve the health care system by improving their decisions on issues related to health care financing, access, coverage and cost.

The program on delivery/organization/markets conducts, supports and manages studies designed to give health care leaders and policymakers the information and tools they need to improve health system performance. Performance in this context includes quality, safety, effectiveness, and efficiency. Through qualitative and quantitative research, delivery-based research networks and other partnerships, this program provides system and policy leaders with evidence on how changes in health care delivery affect performance across acute, community-based and long-term care settings. Delivery and organizational variables of special interest include structure, function, workforce, leadership, governance and culture. The mission of this program extends to capture how market forces such as payment methods, financial and non-financial incentives, funding of safety net providers, employer purchasing strategies, regulations, legislation and judicial actions and other aspects of the competitive environment influence health care delivery, organization, and ultimately provider performance. The end goal of this program is to improve healthcare by advancing the use of evidence by health care leaders and policy-makers.

A. Accomplishments - Integrated Delivery System Research Network (IDSRN)

Accomplishments in the past year include the development of a simulation model of mass antibiotic prophylaxis for bioterrorism response developed by Weill Medical College of Cornell University in conjunction with New York City health and emergency preparedness agencies. The model was used in May 2002 in a large-scale live exercise that evaluated the city's ability to respond to a large bioterrorist attack. Called Operation TriPOD, for "Trial Point of Dispensing," it involved tracking simulated patients using bar-code technology that allowed the organizers to measure both the time required to process each patient and the accuracy with which the correct

antibiotic was given to the right "patient." National, regional and municipal officials are using the results of this exercise to develop a template for bioterrorism response that can be adapted by other cities in the United States and around the world.

In another IDSRN project, Marshfield Health Clinic assessed the impact of its Coumadin Clinic on health care utilization, including urgent care, emergency department and inpatient events. While the estimates are still preliminary, testimony by Marshfield Clinic before the Way and Means Committee's Subcommittee on Health strongly suggests that disease State management projects like Marshfield's Coumadin Clinic offer potential for significant cost reductions by averting hospital inpatient and emergency department visits. Medicare, for example, would save an estimated \$235,943 per 100 person years. Moreover, failure to manage patients on Coumadin appropriately is a leading cause of avoidable medical errors in older patients.

B. Payment and Organizational Structures and Processes

AHRQ developed a Program Announcement (PA) on the effects of payment and organizational structures and processes on the cost, quality, and equity of health care. Important areas to be addressed by this research include: the effects of different payment mechanisms and financial incentives on health care quality, costs, and access; the impact of purchaser and public-sector projects on quality, costs, and access to care and to health insurance; the organizational structures most likely to sustain high-quality, accessible health care; and the impact of different patterns and levels of market competition on health care quality and costs. Below are three examples of grants funded under this program announcement.

- Hospital Finances and the Quality of Hospital Care. This grant will look at the
 relationship between a hospital's financial condition, its operational and resource
 allocation decisions, and the quality of clinical care at that hospital. Since many hospitals
 and provider organizations in the United States are facing significant financial
 constraints, it is important to understand the impact of financial conditions on operational
 decisions.
- Purchaser/Provider Evaluation: Hospital Quality Data. This project will compare and
 contrast the perceptions of health care purchasers and hospital administrators regarding
 the relative importance of hospital quality measures. It will also determine how health
 care purchasers use the comparative reports of hospital performance among their
 employees and for negotiating health coverage. Thus, the study will address key public
 policy questions such as: the impact and utility of public disclosure of hospital patient
 safety measures on purchasers/employers and on hospital administrators, the possible
 pathways for improving hospital performance, and how to increase the impact of future
 hospital comparative reports.
- Physician networks and children with chronic conditions. The aim of this grant is to study the effect of offering out-of-network benefits for children with two chronic conditions: asthma and diabetes. The grant will determine the associations between the out-of-network benefits and cost-sharing of health plans and children's likelihood of seeing and out-of-network physician. The grant will also determine whether quality of care and expenditures are significantly different among children seeing in-network versus out-of-network physicians.

C. Performance Goals

	Socio-economics of Health Care Portfolio						
Performance Goal	FY Targets Actual Performance		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		9		Reference
By 2010, in at least 5 cases, health care leaders, policymakers, public or private organizations will have used AHRQ findings in the area of financing/access/cost/coverage to change practice or policy. Outcome	FY 2005 Conduct or support 15 new projects on research related to financing/access/cost/coverage. Complete a synthesis of research in a significant area of financing/access/cost/coverage.		SG-6				
By 2010, in at least 2 cases, public or private organizations will have used AHRQ findings in the area of delivery/organization/ markets to change practice or policy. Outcome	FY 2005 Conduct or support 12 new projects on research related to delivery/organization/markets. Complete a synthesis of research in a significant area of delivery/organization/markets.		SG-6				

Long-Term Care Portfolio

Persons who need assistance with basic activities of daily living, homemaker activities and other normal role activities (e.g., work, school) comprise the long-term care (LTC) population. This population lives both in the community and in residential settings. Long-term care services are diverse; some of the most important include institutional/residential care, home care, personal assistance services, supportive housing, assistive technologies, services to promote education for children with special needs, services to foster employment for the disabled, rehabilitation and transportation services, and other associated health care services. These services are provided by agencies, family and friends, and institutions, and are paid and unpaid. There are many gaps in our knowledge about this population and the services received. AHRQ has a long-standing role in supporting and conducting research to improve long-term care for the elderly, chronically ill and disabled. The goal of this research is to better understand how to foster independence, prevent unnecessary disability, provide services more efficiently, and improve the quality of care and the quality of life. In addition, this research identifies effective ways to integrate LTC and acute care services, , assure patient safety, develop tools to improve quality of care, and reduce disparities in the delivery of long-term care.

The Agency's long-term care portfolio of grants and contracts are divided into four substantive areas: safety, quality, effectiveness, and efficiency. About half of the grants in the LTC portfolio are concerned with quality issues. The remaining grants are evenly divided into the other three categories.

A. Safety/Quality

Safety is a major concern for the elderly and especially persons in residential settings such as assisted living and nursing homes. It is also a concern for the staff in these facilities. The Agency funds conferences and provides funding to initiate centers to focus on safety issues in long-term care and supports research to improve technology. One study will test whether a computer-based clinical decision support system can lower the rate of adverse drug events (ADEs) and potential ADEs in the long-term care setting. A new center on patient safety in long-term care at Emory University in Atlanta, Georgia will tell us how we can prevent falls and pressure ulcers in nursing homes and assisted living facilities. A center at New York University is focusing on safety in home care and a new center at the University of South Florida will tell us how to prevent falls for persons in the community. A study by AHRQ staff suggests that fractures in nursing homes can be prevented with increased aide staffing and adjustments to drug prescribing practices.

There are many quality concerns in the provision of long-term care services and caregiving. For example, a University of Colorado study will tell us the how well report cards and other varied information strategies help consumers make nursing home choices based on quality. Other studies develop a nurse restorative care program for residential care; interventions to improve staff motivation, job design, work environment in nursing homes; improve assessment of pain and mobility in nursing homes; use electronic reminders to improve adherence to evidence based guidelines in home care; use a clinical algorithm to manage urinary tract infections and reduce antibiotic use in residential facilities; and evaluate the use of nurse practitioners to improve urinary incontinence care in nursing homes.

In addition, the Agency is encouraging building partnerships between healthcare organizations. Helping home care agencies collaborate on evidence-based quality improvement activities is one example. Two of these partnerships are implementing improvements in clinical information in a number of nursing homes to improve pressure ulcer care and increase the use of nursing home care guidelines for pain and pressure ulcers.

B. Effectiveness

Another important part of the long-term care portfolio includes studies that assess the effectiveness of care. Generally, long-term care studies focus on outcomes such as the change in functioning, re-hospitalizations, and mortality. Some studies directly evaluate outcomes associated with interventions while others attempt to better understand the variation in outcomes associated with different heath conditions. For example, a training grant is funding outcome studies of persons in Program of All Inclusive Care for the Elderly (PACE) settings. Other studies include an evaluation of a geriatric nurse practitioner intervention is attempting to reduce behavioral problems for Alzheimer's patients and caregiver stress; tracking functional outcomes after trauma for adolescents; and assessing the impact of Medicare prospective payment on survival, discharge to community, and use of rehabilitation services.

C. Efficiency

Another important area in the AHRQ long-term care portfolio concerns the efficiency of provision of care across the continuum of care. Long-term care recipients often move between home care or residential care and hospitals. The high cost of hospital care makes it an important target for cost reduction. Hospital studies include the development of a model to assess factors that increase hospital admission rates for nursing home residents and an evaluation of the reasons for variation in hospitalization rates for pneumonia patients in Evercare-affiliated nursing homes. Evercare is a prospective payment model with incentives to reduce hospital care. Other studies include an assessment of the overall health care use of persons in assisted living facilities, and a study of access to care, preventive services and specialists for disabled adults. A study by AHRQ staff indicates that the decline in Medicare funding of home care after the Balanced Budget Amendment has been accompanied by increases in state and local expenditures.

D. Data Development

Two data development activities within MEPS are underway that will increase the ability to report on populations and services currently not being captured.

The first is a multi-year collaboration across DHHS Agencies that has begun to develop data collection methodologies for the population in assisted living facilities, a group for which no national measures exist. Development of an instrument that would be used to identify characteristics and quality concerns of the assisted living population would then follow.

The second data effort is a project to measure the costs associated with informal care as measured with the time spent in caregiving. Development of an instrument is underway to design methods to measure the economic costs associated with providing care to the long-term care population. With these measures alternative policy options for the efficient delivery of services could be assessed.

E. Performance Goals

	Long-Term Care Portfolio				
Performance Goal	FY Targets	Actual Performance	Reference		
At least 5 long-term care facilities will make changes in care to affect quality, safety, or efficiency based on AHRQ	Publish or submit for publication 10 articles on long-term care in peer-reviewed journals. Complete a synthesis of research findings in assisted living.		SG-1/3/5 HP-1		
long-term care study results.	Have in place an IAA with NCHS to begin development of data collection instruments specific to the assisted living population.				
	Develop a paper instrument to measure the time associated with caregiving by household members or others within the household.				

Pharmaceutical Outcomes Portfolio

The Pharmaceutical Outcomes portfolio has three components, the Centers for Education and Research on Therapeutics (CERTs), the pharmaceutical outcomes research projects (all projects are complete), and projects funded through investigator-initiated research and other AHRQ mechanisms. There are other pharmaceutical studies funded by AHRQ that are included in the Patient Safety Portfolio rather than in this portfolio.

CERTs were originally authorized in the Food and Drug Modernization Act of 1997. The central objective of CERTs is to develop new and effective ways to improve the use of health care therapeutics throughout the nation's health care system. Therapeutics includes drugs, biologics, and devices. CERTs combine support of basic health care research at research institutions (the centers) with concerted efforts to inform clinical practitioners and policy makers about the latest advances in therapeutics-related research.

The CERTs was authorized as a demonstration program, thus the program does not provide comprehensive coverage of research to improve safety and effectiveness.

A. Safety/Quality

Medication errors account for a significant and prominent aspect of patient safety issues and medication errors are represented in both the Patient Safety and Pharmaceutical Outcomes Portfolios. The Patient Safety Portfolio stresses errors of commission, whereas the Pharmaceutical Outcomes Portfolio covers both errors of commission and omission. The CERTs is viewed in the same context as the Centers of Excellence in Patient Safety. Two of the CERTs research centers have large Patient Safety grants with overlap between the two portfolios.

Goal: Develop knowledge and understanding of errors in health care by developing a patient safety research agenda specific to medications. This would be done in partnership with the CQUIPs program and the Investigators from the projects within the Patient Safety Portfolio that have a focus on medication. The focus of this agenda would be identification of areas of overlap and ascertainment of gaps in medication error research.

The Patient Safety program, the Institute of Medicine, the CERTs and others focus considerable resources on inappropriate and product overuse. The Pharmaceutical Outcomes projects and the CERTs have done a number of studies and tested programs that have focused on under use of products. Such studies have included studies of beta-blocker use in patients who have been discharged after myocardial infarction (heart attack). Neither AHRQ nor the CERTs have been able to systematically quantify the clinical and economic impact of under use.

Goal: Convene a multi-disciplinary group of experts in clinical medicine, epidemiology, economics and policy to assist us in identifying methods to determine how to measure under use and its cost and clinical consequences.

B. Effectiveness

The appropriate use of pharmaceutical agents is critical to effective, high quality, affordable health care. Understanding which agents work, for which patients, and at what cost, can inform programs to manage the selection, utilization, and cost of pharmaceutical therapies and services within a changing health care environment. This information is often not available for pharmaceuticals because the Food and Drug Administration (FDA) approval process requires pharmaceutical manufacturers to provide only evidence of safety and efficacy for one indication within rigidly controlled clinical trials.

CERTs and other pharmaceutical projects cover only a small portion of the potential universe of important questions of therapeutic effectiveness.

Goal: Develop a plan that identifies gaps in pharmaceutical effectiveness research and opportunities for implementation of evidence-based pharmaceutical usage. Using this information, develop a mechanism to increase the number of CERTs such that there are an adequate number of CERTs centers to comprehensively approach high priority questions of drug effectiveness.

C. Efficiency

The 1999 AHRQ reauthorization specifically adds cost-effectiveness research to the list of responsibilities for the CERTs. Each CERTs center will incorporate measures of cost effectiveness into Core (defined as those funded completely or in part through AHRQ funding) projects where feasible.

Goal: Expand the component programs of pharmaceutical outcomes research. Program staff will work with the CERTs Coordinating Center to identify the economic component of the CERTs. This information will be consolidated into a Program Note. We will coordinate with the AHRQ Research Initiative on Cost Effectiveness (RICE) program to develop a dissemination plan for this information.

D. Accomplishments – CERTs

Since its inception in September 1999, the CERTs have developed a portfolio of more than 120 completed and ongoing studies, the results of which address important issues to advance the best use of therapies. Following are examples of how the CERTs seek to improve the Nation's health through the best use of medical therapies.

Patients with certain types of heart disease are not taking medicines that may save their lives. Aspirin is inexpensive and available over-the-counter and it greatly reduces the risk of heart attack, stroke, and related death in people with coronary artery disease (CAD). Similarly, beta-blockers, have been shown to help people with congestive heart failure (CHF). Data collected by the Duke University CERT showed that 87 percent of cardiac patients were using aspirin. This reflects, in part, the adoption of the recommendations from the AHRQ-sponsored U.S. Preventive Services Task Force. However, data collected by the Duke University CERT also confirmed that 13 percent of people with CAD were not receiving adequate therapy. The people with CAD who were not taking aspirin were almost twice as likely to die within 1 year as those who were taking aspirin. The news was only slightly better for people with CHF who were

not taking a beta-blocker; they had 1.5 times the risk of dying compared with people who were taking the medicine. The Duke CERT is now investigating ways to get life saving medicine to people who need it. Programs to overcome barriers and save lives can be designed once more is understood about why people are not taking these medicines.

Monitoring anti-HIV drug levels. The effectiveness of drugs for women and children with HIV depends on the way they take the drugs and how their bodies handle the medicine. The University of North Carolina CERT developed a screening test for kids to measure the levels of anti-HIV drugs called protease inhibitors in the bloodstream. The test will determine whether the level of drugs is too high or too low as a result of the way the drug was taken or absorbed. Research on the screening test had an unexpected, important finding: giving anti-HIV drugs with water to babies can speed the passage of the drugs through babies' systems before they have a chance to work. Giving drugs with infant formula greatly improves results. In another case, the test showed high levels of protease inhibitor in a child whose parent had readjusted the dose. Some patients were not getting their drugs at all. In one case, a child's mother was too ill herself to medicate her child, but the problem was only uncovered by the screening test. The test demonstrated that there might be a big difference between what a doctor prescribes and what is at work in the body. Providing this test to HIV-infected individuals can go a long way in ensuring that people are getting the level of drugs they need. The test also may help reduce the incidence of drug-resistant viruses and the cost of caring for patients with HIV.

Medicaid Populations. Collectively, the CERTs centers have access to more than 20 unique data sources, representing over 50 million people, which they use to conduct population-based studies. Many of these studies have been conducted within Medicaid populations, including drug effects and use, prior authorization for use of nonsteroidal anti-inflammatory drugs (NSAIDS), prevention of falls, reimbursement for community providers of long-term care, and evaluation of a nursing-home dispensing change. In addition, studies are underway to gather information that Medicaid programs can use to make coverage and other policy decisions such as drug utilization review, economic effects of beta-blocker therapy in heart failure, efficacy and toxicity of drugs used in pediatric AIDS, prevalence of type 2 diabetes mellitus in children, drug interactions, fractures from osteoporosis, and other topics. The Vanderbilt CERT, in particular, has a long history of providing technical assistance to the Tennessee Medicaid program under a contract that has been active since 1972.

Rethinking antibiotics before dental treatment. Many doctors prescribe antibiotics before dental treatment to reduce the risk of endocarditis (infection of the heart lining and valves). Because conventional wisdom suggests that patients with heart problems are at risk, this preventive measure has been recommended for more than 45 years. The University of Pennsylvania CERT conducted a study to evaluate and quantify the risk of such infection. They found that the incidence of infection remained the same even after the introduction of widespread antibiotic prophylaxis, and that neither dental work in general, nor any individual procedures, was associated with infective endocarditis, with the possible exception of tooth extraction. The study also determined that flossing daily slightly reduced the risk of infection. Efforts are under way to have these findings incorporated into American Heart Association guidelines. These findings will affect an important source of unnecessary antibiotic use.

E. Performance Goals

Pharmaceutical Outcomes Portfolio			
Performance Goal	FY Targets	Actual Performance	Reference
Finalize development of a sustainable programmatic structure to fulfill authorizing legislation Outcome	FY 2004 Compendium of annual program products FY 2003 Finalize charters for the Steering Committee and Public-Private Partnerships	Completed	SG-1/5 HP-14/17
Identify gaps in pharmaceutical effectiveness research and opportunities for implementation of evidence-based pharmaceutical usage Outcome	FY 2005 Develop a mechanism to increase the number of CERTS. Develop a dissemination plan with RICE FY 2004 Identify funding partners and expand personnel to include experts to manage projects Identify a plan for the economic component of CERTS and consolidation into a program note. FY 2003		SG-1/5 HP-14/17
Convene a multi- disciplinary group of experts to assist in identifying methods to determine how to measure under-use, its cost, and clinical consequences	Identify funding partners – govt & nongovt. FY 2003 Generate annual pharmaceutical update.	Completed	SG-1/5 HP-14/17
Develop knowledge and understanding of errors in health care by developing a patient safety research agenda specific to medications	FY 2005 Program staff will participate in or organize at least two relevant conferences FY 2004 Partner with CQUIPs and Patient Safety to focus an agenda on areas of overlap and gaps in medication error research. FY 2003 Program staff will participate in or organize at least two relevant	Completed	SG-1/5 HP-14/17

conferences .	

Bioterrorism Portfolio

AHRQ, through its Bioterrorism activities, supports research in assessing and improving the U.S. health care system's capacity to respond to possible incidents of bioterrorism. These research projects examine an array of issues related to clinicians, hospitals, and health care systems, as well as linkages among these providers, local and State public health departments, emergency responders, and others preparing to respond to terrorist events and other public health emergencies. A third of the projects support regional planning and surge capacity issues. This work is an essential component to CDC and HRSA investments.

A. FY 2002 Bioterrorism Funding

In 2002, AHRQ received over \$10 million from other agencies to assist them and to continue efforts to support the national preparedness for a bioterrorist event. AHRQ's current bioterrorism activities continue to support departmental activities in the 3 broad areas stated previously. Through various contract mechanisms, AHRQ-funded researchers are preparing tools and models that can be exported to States and interested entities for use in their bioterrorism preparedness planning projects. Examples of projects currently underway include:

- Development of national guidelines for dispensing medications and/or vaccinating large populations in the event of a bioterrorist event.
- A Web-based data tool and manual that facilitates health care systems' ability to monitor and track resources that would be needed to respond to a bioterrorist event. This work will be developed with rural hospitals as a model.
- A Regional Health Emergency Assistance Line and Triage Hub (HEALTH) Model addressing the integration and communication with public health agencies and other facilities for efficient management of patient care during and after a public health emergency such as a bioterrorist event.
- Development of a report that provides an overview of current knowledge on how disaster drills and training are conducted and evaluated for bioterrorism preparedness and a tool for evaluating disaster drills and training that can be disseminated to States and other interested groups.
- Development of information technologies available in practice-based settings for surveillance of signs and symptoms of diseases that suggest bioterrorism in pediatric and adult primary care practices.
- Convening of an AHRQ-sponsored conference focused on preparedness and disaster responses for pediatric patients.

Future research activities will address considerations relevant to rural preparedness, vulnerable populations, pediatric care issues, and public-private partnerships related to the use of information technology for surveillance, detection, notification alerts, and education of clinicians.

B. FY 2003 Bioterrorism Funding

In 2003, AHRQ received nearly \$9 million, both in appropriated funds and funds from other agencies, to assist them and to continue efforts to support the national preparedness for a bioterrorist event. A total of approximately \$5 million went to support research grants that examine and promote health care systems' readiness for a bioterrorist event through the development of new evidence, tools and models.

In light of recent events in the U.S., there is considerable urgency to develop a public health infrastructure that is prepared to respond to acts of bioterrorism. AHRQ recognizes that community clinicians, hospitals, and health care systems have essential roles to play in this infrastructure. To inform and assist these groups in meeting the health care needs of the U.S. population in the face of bioterrorist threats, AHRQ supports research that emphasizes the following research objectives:

- 1. Emergency preparedness of hospitals and health care systems for bioterrorism;
- 2. Enhanced capacity needs of ambulatory care, home and long-term care, care of phychosocial consequences, and other related services during and after a bioterrorist event;
- Information technology linkages and emerging communication networks to improve the linkages between the personal health care system, emergency response networks and public health agencies; and
- 4. Novel uses of health care system training strategies that can prepare community clinicians to recognize and manage a bioterrorist event.

C. Accomplishments – Bioterrorism

AHRQ conducted two 1.5 day regional bioterrorism and health system preparedness workshops focusing on AHRQ supported bioterrorism research findings and promising practices implemented by states, localities and health systems. Five written briefs focusing on bioterrorism issues raised in the regional workshops and during the national Web-assisted audio conferences conducted by AHRQ will be prepared.

Through AHRQ's User Liaison Program (ULP), five 90-minute Web-assisted audio conferences were conducted throughout 2003 focusing on bioterrorism and health systems preparedness. Each conference focuses on AHRQ supported bioterrorism research findings and promising practices implemented by states, localities and health systems.

D. Performance Goals

	Bioterrorism Portfolio			
Performance Goal	FY Targets	Actual Performance	Reference	
Prepare hospitals & health care systems for bioterrorism and other public health emergencies Outcome	FY 2005 Enhance capacity needs for ambulatory care and other services during and after a bioterrorism event and other public health emergencies Improve information technology linkages and emerging communication networks to improve	remormance	SG-2	
	linkages between emergency response networks and personal health care systems Develop novel health care system			
	training strategies that prepare community clinicians to recognize and manage bioterrorism events and other public health care systems			

Training Portfolio

AHRQ Training activities more broadly encompass research capacity development both at the individual and institutional level. The intent of these activities is to develop, broaden and diversify the talent pool conducting health services research. Prime focus is placed on ensuring that the cadre of researchers and institutions conducting research are responsive to gauging changes in the delivery of the healthcare system and responding to them in order to enhance quality, efficiency and effectiveness of health care and reduce patient errors. Ultimately, the success of these endeavors is to be measured in terms of developing productive researchers who in turn develop new knowledge that is ultimately translated or contributes to improvements in health delivery, policy or clinical care at the local, state, or national level. In FY 2003, AHRQ continued its investment in the development of researchers through its NRSA program, which supports the training of over 150 investigators annually, as well as through over 15 dissertation and 10 new career development awards. In addition, AHRQ continued to embark on its mission to increase the geographic and demographic diversity in the pool of researchers through its BRIC and M-RISP programs, which respectively are designed to broaden the National capacity to conduct health services research across a wide range of states and in traditionally minority serving institutions. Currently, these projects support research largely focusing on health care disparities issues in the following states: Kentucky, Louisiana, Mississippi, New Jersey, Utah, Idaho, Montana, Nevada, Utah, Alabama, Hawaii, Texas, Georgia, Tennessee, North Carolina, and the District of Columbia.

Multi-staged goals are set for all of the above activities, with immediate, short-term success measured in terms of "graduation" – i.e., students completing training and centers of excellence being established. Intermediate objectives focus on research productivity and visibility of AHRQ-supported activities, with the goal to achieve long-term sustainability of initial investments through institutionalizing programs and the ability of new emerging centers of excellence to achieve independence. Long-term aims of these activities are to generate new knowledge, methods, and tools which car translated into improvements in clinical care, health care system delivery and health care policy at the local, state, regional or national levels.

A. Accomplishments – Training Portfolio

The demand for training in fields such as health economics, health care outcomes, and organizational/management health care research exceeds the supply. Employment among students trained is high. Virtually all of students supported through AHRQ training programs begun in 1986 (94 to 98 percent of postdoctoral students who have completed training) are gainfully employed in health services research or administration.

Three quarters of all students graduating from AHRQ-sponsored training programs publish in refereed journals and up to 80 percent are first authors on their publications; remaining numbers are actively engaged in the conduct of applied research or its administration working in the government, private industry, or research foundations, and the health care delivery system

Key recent publications produced by former students in journals such as JAMA and NEJM have been nationally acclaimed; for example one article drew attention to the need for greater use of computerized physician order entry systems and staffing of ward-based clinical pharmacists to curtail pediatric inpatient medical errors. Anther article found no difference in neonatal

outcomes or HMO expenditures between early discharge programs and state-mandated program preventing early discharges.

Research or research methods produced by former students and in emerging centers of excellence in the BRIC and M-RISP programs supported by AHRQ have resulted in recent impacts, such as:

- Contributing to the structure of CMS nursing home quality indicators on weight loss in nursing homes;
- Influencing modifications in how HRSA measures primary care availability for future designations of shortage areas;
- Leading to changes in New Hampshire's Board of Nursing re-licensure to enable tracking of the state's workforce to improve availability and diversity
- Providing a foundation for improvement in areas of neurological injury at eight medical centers in New England;
- Adapting novel community and church-based recruitment efforts to:
 - enhance participation in prevention research focusing on mammography use among women in a rural southern state; and
 - development of research partnerships among dental providers, state agencies and day care provides in the Mississippi Delta region that have resulted in enhanced delivery of dental services for poor children who prior to the establishment of these networks did not receive such services

B. Performance Goals

	Training Portfolio				
Performance Goal	FY Targets	Actual Performance	Reference		
Increase the number of minority researchers trained as health services researchers by 5% annually	FY 2004 5% increase over FY 2003 baseline FY 2003 New Measure Establish baseline	40	SG-1/5 HP-23		
Support the career development of individual investigators	FY 2004 Maintain baseline FY 2003 Establish Baseline # programs	40	SG-1/5 HP-23		

3. HCQO Funding History

Funding for the Research on Health Costs, Quality and Outcomes program during the last five-years has been as follows:

	<u>Amount</u>	<u>FTEs</u>
1999	\$139,314,000	212
2000	\$165,293,000	243
2001	\$226,385,000	262
2002	\$247,645,000	272
2003 Enacted	\$252,663,000	272
2004 Enacted	\$245,695,000	272
2005 Request	\$245,695,000	272

Sources of Research on Health Cost, Quality and Outcomes funding follow:

	Budget	1 Percent	
	Authority	_Evaluation_	<u>Total</u>
1999	97,967,000	41,347,000	\$139,314,000
2000	107,717,000	57,576,000	\$165,315,000
2001	102,255,000	124,130,000	\$226,385,000
2002	-0-	247,645,000	\$247,645,000
2003	-0-	252,663,000	\$252,663,000
2004	-0-	245,695,000	\$245,695,000
2005 Request	-0-	245,695,000	\$245,695,000

4. Rationale for AHRQ's FY 2005 Request

The FY 2005 Request maintains the FY 2004 Enacted level for the Research on Health Costs, Quality and Outcomes budget activity. These components are:

I	Research and Training Grants	- \$14,855,000
	(Non-Competing Patient Safety Grants)	(+ \$ 30,052,000)
	(Non-Competing Non-Patient Safety Grants)	(- \$ 24,711,000)
	(New Patient Safety Research and Training Grants)	(- \$ 31,000,000)
	(New Non-Patient Safety Research and Training Grants)	(+ \$ 10,953,000)
	(Non-Patient Safety Supplements)	(-\$ 149,000)
II	Non-MEPS Research Contracts and IAAs	+ \$ 12,955,000
	(Patient Safety Contracts and IAAs) (Non-Patient Safety Contracts and IAAs)	(+ \$ 5,448,000) (+\$ 7,507,000)
Ш	Research Management	+ \$ 1,900,000

The budget continues the President's commitment to improve the quality of care and patient safety in all health care setting by proposing \$84,000,000, \$4,500,000 above the FY 2004 level, in AHRQ. Within this total, \$50,000,000 will fund grants to continue efforts to promote, accelerate, and demonstrate the development and adoption of information technology, including small and rural communities where health information technology penetration has been low.

The President's budget proposes doubling to \$100,000,000 funding for demonstration projects on promising health care information technology (IT). In support of this effort, the Budget proposes \$50,000,000 in new funding within the Office of the Secretary to support State or regional demonstration grants to test the feasibility of information technology exchange among health care settings and to fund other innovative IT projects that improve health care quality. These investments will complement and build upon AHRQ's FY 2004 demonstration grants and other activities to evaluate the effects of IT on the safety and quality of health care, a critical component of assuring that the IT's positive benefits are adopted broadly.

These efforts will also help to accelerate public-private efforts to adopt health data standards begun under the President's Consolidated Health Informatics initiative, to set uniform standards for the exchange of clinical health information within the Federal government. In 2003, standards in 5 of 24 health data domains were endorsed, addressing areas such as laboratory test results and retail pharmacy transactions.

The Administration will work with those involved in health care IT to advance the effort to translate IT opportunities into higher quality, safer and more efficient health care for all Americans.

I – Research and Training Grants (-\$14,855,000)

The FY 2005 Request provides a decrease of \$14,855,000 for research and training grants over the FY 2004 Enacted level of \$113,770,000.

Non-Competing Research and Training Grants (+\$5,341,000)

Patient Safety

The FY 2005 the non-competing research and training grants portion of the patient safety portfolio are funded at \$40,491,000, an increase of \$30,052,000. This includes a total of \$31,000,000 to continue commitments for the FY 2004 Patient Safety Health Care Information Technology Program.

Non-Patient Safety

The FY 2005 non-competing non-patient safety research and training grants are continued at \$34,971,000, a decrease of \$24,711,000 from the FY 2004 Enacted level of \$59,682,000. This decrease in non-competing funds allows AHRQ to fund new non-patient safety research in the FY 2005 Request.

<u>Performance Goals for Non-competing Research and Training Grants</u>: AHRQ's non-competing research and training grants are directly linked to three of our strategic outcome goals.

- AHRQ Goal 1. Safety/Quality. Improve health care safety for all Americans through evidence-based research and translation and to build capacity to improve the quality of health care for Americans.
- AHRQ Goal 2. Efficiency. Develop strategies to improve access, foster appropriate use, and reduce unnecessary expenditures.
- AHRQ Goal 3. Effectiveness. Translate, disseminate, and implement research findings that improve health care outcomes.

Each specific grant is then further divided into one of 11 portfolios of work. Each portfolio of work also has outcome and output goals. Please see the section, beginning on page 11, that provides goals by portfolio of work.

New Research and Training Grants (-\$20,196,000)

Patient Safety (-\$31,000,000)

AHRQ's initial investment in Health Care Information Technology (HIT) in FY 2004 supported the development of new knowledge and best practices regarding diffusion of HIT in health care settings. As we strive to achieve widespread implementation of HIT to improve patient safety and quality, we have much to learn about the transition from planning for HIT in a community to implementation. As part of AHRQ's Transforming Healthcare Quality through Information Technology (THQIT) research funding, \$7,000,000 was invested in one-year planning grants in FY 2004, with \$5,000,000 directed to small and rural communities. At the end of the planning year, AHRQ expects that many of these small and rural communities will be ready to launch

interoperable implementation projects in their community. In order for us to learn generalizable lessons from the diffusion of HIT in these communities, AHRQ proposes to reinvest the \$7,000,000 in FY 2005 for new implementation awards for those communities that have completed a successful planning process. The main objective of these new implementation awards would be to support organizational and community-wide implementation of HIT as well as to evaluate the extent to which HIT contributes to measurable and sustainable improvements in patient safety, cost, and overall quality of care. Local and regional collaborations within small and rural communities, acute care hospitals, community health centers, public health departments will be targeted.

Non-Patient Safety (+\$10,804,000)

In the FY 2005 Request, AHRQ's new non-patient safety research and training grants increase \$10,804,000 from the FY 2004 Enacted level of \$5,649,000. By reinvesting funds from non-competing grants, AHRQ requests \$14,039,000 to renew several AHRQ programs, including: small research grants, conference grants, dissertation grants, grant supplements, research career awards, the Building Research Infrastructure & Capacity Program (BRIC) program, Minority Research Infrastructure Support Program (M-RISP), Centers for Education and Research on Therapeutics (CERTs) program, and Practice Based Research Networks (PBRNs). In addition, AHRQ requests \$2,414,000 in new funds for Research Empowering America's Changing Healthcare System (REACHES). These funds will expand work in the area of adopting research findings in real-world settings and assessing their impact and generalizability.

Small Research Grants (+\$1,700,000)

In FY 2005, AHRQ requests \$1,700,000 to support small research grants. AHRQ's small research grant program is designed to provide support for new investigators or researchers new to health care services issues. These grants encourage preliminary, exploratory, or innovative research in new or previously unexamined areas. Some of AHRQ's currently funded small research grants include:

- Racial Difference in Physician-Patient Communication (University of Rochester)
- Uncertainty in Cost Effectiveness Analysis (Columbia University of Health Sciences)
- Nursing Practice Models in Long-Term Care Facilities (University of Minnesota)
- The Experiences and Challenges of Informal Caregivers (Johns Hopkins University)
- Do False Mammograms Lead to Negatively Affected Health? (Medical College of Wisconsin)

Conference Research Grants (+\$1,439,000)

In FY 2005, AHRQ requests \$1,439,000 to fund conference research grants. Conference grants are intended to complement and promote AHRQ's core research by providing a mechanism to (1) develop health services research agendas and identify strategies and mechanisms for studying them; (2) discuss and develop consensus around health services research methodological and technical issues; (3) disseminate health services research information and facilitate adoption of research findings from AHRQ-sponsored research and research training grants in the formulation or evaluation of health policy, management of health care programs, and use or purchase of health services; and (4) develop partnerships with stakeholder organizations and build their capacity to participate in research activities and use the results of health services research.

<u>Dissertation Research Grants (+\$500,000)</u>

In FY 2005, AHRQ requests \$500,000 to support dissertation grants. Through the Dissertation Research Grant Program, AHRQ seeks to expand the number of researchers who conduct health services research related to AHRQ's mission and strategic plan. 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 in a health services research career. Some of AHRQ's currently funded small research grants include:

- Nursing Interventions and Outcomes Post Prostatectomy (University of Pennsylvania)
- Telehealth Support in Cardiovascular Disease (University of Connecticut)
- Modeling Health Utilization of Medicaid Children (Georgia State University)
- Understanding the Role of Race in Physician Decision to Prescribe Opioid Analgesia (Metrohealth Medical Center)

Supplements (+\$500,000)

AHRQ requests \$500,000 for grants supplements in FY 2005. AHRQ makes supplemental grants funds for three purposes: administrative supplements, which are made only when the need for additional funds is due to unforeseen costs to fulfill objectives of the grant project or to expand the scope of a grant project; supplements to a principle investigator who employs minority investigators; and supplements to a principle investigator who employs investigators with disabilities. In FY 2001, AHRQ used administrative supplements to increase funding for the Centers for Education and Research on Therapeutics (CERTs) program. AHRQ recognized that the mission of the CERTs was consistent with the patient safety agenda and therefore provided additional funding to enhance the work of the CERTs in this area.

Research Career Awards (+\$2,500,000)

In FY 2005, AHRQ requests \$2,500,000 to support Research Career Awards. Research Career Awards provide 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. AHRQ supports two types of career awards:

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. Examples of recently funded K02 awards include:

- Health Communication Over the Internet (University of Texas, Houston)
- Two-Stage Model for Colorectal Cancer Screening (Baylor College of Medicine)
- Improving Dispute Resolution in Healthcare (Harvard University)

Mentored Clinical Scientist Development Award (K08) in Health Services Research. The K08 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. Examples of recently funded K08 awards include:

- Emergency Department Crowding: Cause and Consequences (Health Partners Research Foundation, Minneapolis)
- Clinical Prediction Rule for Pelvic Fracture Hemorrage (University of Washington)
- Collaborative Management of Diabetes in Blacks (Medical University of South Carolina)

Building Research Infrastructure & Capacity Program (BRIC) (+\$1,000,000)

In FY 2005, AHRQ requests \$1,000,000 to renew the Building Research Infrastructure & Capacity Program (BRIC) program. BRIC was launched by AHRQ in FY 2001 to build research capacity in States that have not traditionally been involved in health service research. The primary goals of BRIC are to (1) enhance the competitiveness of research institutions and organizations in the BRIC eligible States for AHRQ-funded grants and (2) increase the probability of long-term growth of AHRQ-competitive funding to investigators at institutions from these eligible States. AHRQ funded six BRIC awards in FY 2001. Ten States received direct funding with collaborations spanning across the country. For example, in the Intermountain Region where rural and frontier healthcare issues are a major concern, five States have formed a consortium and are sharing resources to develop individual state projects that will be submit to AHRQ as future research projects. In Mississippi where healthcare for children living in the Delta is poor or nonexistent, the BRIC grantee has formed partnerships with several pediatric experts, including consultants from Harvard. These grants ended in FY 2002. Renewal of this program in FY 2005 will allow AHRQ to build, increase, strengthen, and sustain the health services research competitiveness of institutions and organizations within eligible states.

Minority Research Infrastructure Support Program (M-RISP) (+\$1,000,000)

In FY 2005, AHRQ requests \$1,000,000 in new funds for two additional Minority Research Infrastructure Support Program (M-RISP) grants, for total support of \$2,000,000 in FY 2005. The M-RISP program was established to increase the capacity of institutions that serve racial and ethnic minorities to conduct rigorous health services research. In FY 2001, the first year of the program, three educational institutions located in Hawaii, Tennessee and Texas were funded. In FY 2002, two more institutions in North Carolina and Washington, D.C. received support. In addition to complementing the Agency's goal of building capacity and infrastructure to conduct health services research in predominantly minority institutions, the research supported under these grants focus on the Departmental priorities of reducing racial disparities and improving health for priority populations. The FY 2001 projects will expire in FY 2003. The projects begun in FY 2002 will receive continuation funding. New funds in FY 2005 will allow AHRQ to develop and broaden the national infrastructure for conducting health services research.

Non-Patient Safety Centers for Education & Research on Therapeutics (CERTs) (+\$3,400,000) In FY 2005, AHRQ requests \$3,400,000 in new funds to support four Centers for Education and Research on Therapeutics (CERTs) grants. AHRQ is currently supporting 8 CERTs for a total of \$5.1 million. Total support for CERTs in FY 2005 would be \$8.5 million.

CERTs is a national effort to increase awareness of the benefits and risks of new, existing, or combined uses of therapeutics, such as pharmaceuticals, through education and research. The program, which currently consists of seven centers and a Coordinating Center, is administered as a cooperative agreement by the Agency for Healthcare Research and Quality (AHRQ), in consultation with the U.S. Food and Drug Administration (FDA). The research conducted by the CERTs program has three major aims:

 To increase 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.

- To provide clinical information to patients and consumers; health care providers; pharmacists, pharmacy benefit managers, and purchasers; health maintenance organizations (HMOs) and health care delivery systems; insurers; and government agencies.
- To improve quality while reducing cost of care by increasing the appropriate use of drugs, biological products, and devices and by preventing their adverse effects and consequences of these effects (such as unnecessary hospitalizations).

The centers have completed several important projects since their inception. Researchers at the University of North Carolina center published a study showing a link between rickets in breast-fed children and a lack of vitamin D supplementation, especially among black infants. As a result of this study, the North Carolina Department of Health and Human Services made vitamin D available free to breast-feeding women through its Women, Infants, and Children (WIC) program. In another study, researchers at the Duke University center examined trends in aspirin use, patient characteristics, and long-term outcomes for aspirin effectiveness in more than 25,000 patients with cardiovascular diseases. They found that the percentage of patients with heart disease who report taking aspirin regularly increased between 1995 and 1999.

The CERTs concept grew out of recognition that, while pharmaceuticals and other medical products improve the lives of many patients, underuse, overuse, adverse events, and medical errors may cause serious impairment to patient health. Additional support for the CERTs program will ensure research on the knowledge gaps that remain:

- Limited comparative information exists on the risks, benefits, and interactions of both new and older agents.
- Lack of guidance to health professionals on the appropriate, cost-effective use of therapeutics that will, in turn, lead to improved outcomes, error reduction, and prevention of adverse events.

Practice Based Research Networks (PBRNs) (+\$2,000,000)

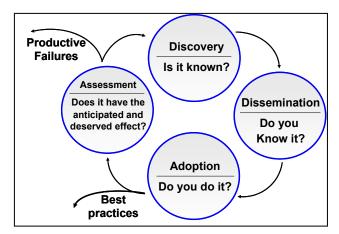
In FY 2005, AHRQ requests \$2,000,000 to renew the Practice Based Research Networks (PBRNs). All of AHRQ's PBRNs expire in FY 2003. PBRNs are groups of community-based practices that work together with clinical investigators to study questions related to primary care and to assure that evidence-based findings are incorporated into actual practice.

With current levels of funding, AHRQ has been able to support 40 networks nationwide. These networks include around 10,000 primary care providers (pediatricians, family physicians, general internists, and nurse practitioners) in community-based practices located in rural, suburban and inner-city settings in all 50 States. These clinicians provide care to around 10 million Americans.

including those insured by Medicare, Medicaid, and those who are uninsured. AHRQ has recently begun collaborating with the Robert Wood Johnson Foundation on a PBRN-focused activity to promote healthy behaviors, including increased physical activity and improved diet. AHRQ's request of \$2,000,000 for this program will improve the capacity of PBRNs to expand the primary-care knowledge base and to establish mechanisms to assure that new knowledge is incorporated into actual practice.

Research Empowering America's Changing Healthcare System (REACHES) (+\$2,414,000) In FY 2005, AHRQ requests \$2,414,000 in new funds to expand work in the area of adopting research findings in real-world settings and assessing their impact and generalizability. AHRQ's

model of the full research cycle is shown in the figure. Historically, most health services research has focused on the Discovery and Dissemination phases of research, with the ultimate goal being publication in a peer-reviewed journal. This grant program will focus on Adoption and Assessment, and will fund demonstration projects for translating existing research into clinical practice, the management of health care organizations, and influence health policy. REACHES will provide funding for such demonstration projects, including assessments of their effectiveness, and



funding for the design and testing of strategies for the wide-spread adoption and utilization of research results that support achieving AHRQ's portfolio outcomes. REACHES builds on AHRQ's prior investments in the Translating Research Into Practice program.

<u>Performance Goals for New Research and Training Grants</u>: AHRQ's new research and training grants are directly linked to three of our strategic outcome goals.

- AHRQ Goal 1. Safety/Quality. Improve health care safety for all Americans through evidence-based research and translation and to build capacity to improve the quality of health care for Americans.
- AHRQ Goal 2. Efficiency. Develop strategies to improve access, foster appropriate use, and reduce unnecessary expenditures.
- AHRQ Goal 3. Effectiveness. Translate, disseminate, and implement research findings that improve health care outcomes.

Each specific grant is then further divided into one of 11 portfolios of work. In the case of small grants, conference grants, grant supplements, PBRNs, and Research Career Awards, and REAHCES until the actual award has been made, we are unable to provide a portfolio of work. At the time of funding, AHRQ will conduct gap analysis of our current 11 portfolios of work and will fund those grants with high peer review scores that also "fill the gap." Please see the section, beginning on page 11, which provides goals by portfolio of work.

Dissertation grants, the BRIC program and the M-RISP program will follow the overall outcome and output goals associated with the training portfolio for FY 2005. These goals can be found on page 47.

New funds for the CERTs program will follow the overall outcome and output goals associated with the Pharmaceutical portfolio. These goals can be found on page 40.

II – Non-MEPS Research Contracts and IAAs (+\$12,955,000)

The FY 2005 Request provides an increase of \$12,955,000 for contracts and IAAs over the FY 2004 Enacted level of \$82,625,000.

Patient Safety Contracts and IAAs (+\$5,448,000)

The FY 2005 Request for patient safety contracts and IAAs reflects an increase of \$5,448,000 from the FY 2004 Enacted level of \$31,061,000. With this increase AHRQ will fund \$3,688,000 in continuing patient safety contracts reduced or not funded in FY 2004, including support for the patient safety Integrated Delivery Systems Research Networks and the patient safety user liaison program.

Included in the FY 2005 Request is \$1,800,000 in new IAAs for an ambulatory information technology demonstration focused on the Indian Health service. These funds will help refine and expand the information technology infrastructure within the Indian Health system to improve health status monitoring, health care quality and efficiency, and financial management of IHS. At the same time, it will produce open source products and generalizable knowledge from the implementation process to share with a broader audience, such as community health center clinics.

<u>Performance Goals for Patient Safety Contracts and IAAs</u>: AHRQ's patient safety contracts and IAAs are directly linked to three of our strategic outcome goals.

- AHRQ Goal 1. Safety/Quality. Improve health care safety for all Americans through evidence-based research and translation and to build capacity to improve the quality of health care for Americans.
- AHRQ Goal 2. Efficiency. Develop strategies to improve access, foster appropriate use, and reduce unnecessary expenditures.
- AHRQ Goal 3. Effectiveness. Translate, disseminate, and implement research findings that improve health care outcomes.

Patient safety contracts and IAAs will follow the overall outcome and output goals associated with the quality/safety of patient care portfolio for FY 2005. These goals can be found on page 11.

Non-Patient Safety Contracts and IAAs (+\$7,507,000)

The FY 2005 Request for non-patient safety contracts and IAAs is increased by \$7,507,000 from the FY 2004 Enacted level of \$51,564,000. These funds will be directed to both continuing and new non-patient safety contracts. AHRQ requests \$3,560,000 to continue enduring AHRQ programs. AHRQ also requests \$3,947,000 in new contracts focusing on implementing new research to close the gaps in AHRQ's research portfolios.

Continuing Contracts (+\$3,560,000)

AHRQ is requesting an increase of \$3,560,000 over the FY 2004 Enacted level to continue enduring research contracts. The following research contracts are requesting increases from the FY 2004 Enacted level to the FY 2005 Request.

Evidence-based Practice Centers

In FY 2005, \$4,400,000 is requested to fund a variety of Evidence-based Practice Centers (EPCs). Since the Agency established the EPC Program in 1997, the availability of EPC clinical and methodological expertise has become a magnet to an increasing number and variety of professional societies, providers, payers, and policymakers. The EPC's are jointly funded by AHRQ and the organizations that recommended the research and have committed to using it. The EPC portfolio has expanded from solely clinical topics to topics ranging from clinical and behavioral health, to health policy, to special economic studies. For example, the 13 EPCs are providing systematic review and analyses in evidence reports for professional societies, providers and other private sector entities that focus on established clinical care practices, as well as alternative and preventive health care practices. Further, EPC reports are focusing on:

- economic studies (e.g., Utilization of Physician Services);
- the effectiveness of financial incentives to patients and providers to enhance the delivery of clinical preventive services;
- cost studies, such as the burden of illness/economic consequences of occupational asthma.

Beginning in FY 2002, the EPCs moved more fully into the health policy arena as providers and purchasers demanded that the EPC expertise also be channeled into production of evidence-based information to help in the decision-making for purchasing quality health care for their employees. In AHRQ's reauthorization legislation, the Congress directed the Agency to provide widespread guidance on systems or methods to rate the strength of scientific evidence. As a first step in developing such guidance, AHRQ commissioned the EPC report "Systems to Rate the Strength of Scientific Evidence." This important report is an essential teaching tool not only for researchers but for purchasers and providers - educating on how to assess the scientific strength or credibility of healthcare studies.

The EPCs also review and summarize evidence relevant to Departmental priorities such as validation of tools to improve quality of care for hospitalized Medicare beneficiaries. Improvement in the quality and effectiveness of health care can occur only through establishing the evidence for such care and translating that evidence into practical tools that are easily understood and used by the many and varied sectors involved in health care.

National Guideline Clearinghouse

In FY 2005, \$1,300,000 is requested to fund the National Guideline Clearinghouse (NGC). NGC, an Internet resource for evidence-based clinical practice guidelines located at www.guideline.gov, has been operational for 6 years. The NGC was develop by AHRQ in partnership with the American Medical Association (AMA) and the American Association of Health Plans (AAHP) to be a resource for physicians, nurses, educators, and other health care professionals.

The NGC is designed to promote quality health care by making the latest evidence-based clinical practice guidelines available in one easy-to-access location. The NGC Web site is updated weekly with new and revised guidelines. In addition to its 24-hour access on the Internet, the clearinghouse has many useful features such as standardized abstracts containing information about each guideline and how it was developed, the ability to make guideline comparisons, access to the full text of guidelines or ordering information, and the capability to browse for guideline titles by organization, disease/condition, or treatment/intervention.

Undoubtedly, the NGC's capacity to make vast amounts of information quickly accessible to clinicians is its biggest asset. Before the development of the NGC, clinicians and others who wanted to study or compare guidelines for any medical condition had to contact individual guideline developers to obtain a copy. Users then had to perform their own side-by-side analysis to determine which, if any, of the guidelines they wanted to follow. The usefulness of the NGC is evidenced by the large number of visits every week by physicians and other health professionals.

National Quality Measures Clearinghouse (NQMC)

In FY 2005, \$3,000,000 is requested to fund the National Quality Measures Clearinghouse (NQMC). NQMC is a Web-based repository of tools for measuring health care quality located at www.qualitymeasures.ahrq.gov. The NQMC mission is to provide practitioners, health care providers, health plans, integrated delivery systems, purchasers and others an accessible mechanism for obtaining detailed information on quality measures, and to further their dissemination, implementation, and use in order to inform health care decisions.

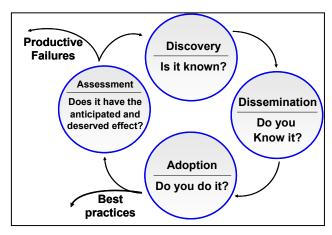
The site is designed to be a one-stop shop for physicians, hospitals, health plans, and others who may be interested in quality measures. Users can search the NQMC for measures that target a particular disease/condition, treatment/intervention, age range, gender, vulnerable population, setting of care, or contributing organization. Visitors also can compare attributes of two or more quality measures side by side to determine which measures best suit their needs. The site also provides material on how to select, use, apply, and interpret a measure.

The NQMC builds on AHRQ's previous activities in quality measurement and will be part of a larger Web site of quality, clinical information, and decision tool components that will include the National Guideline Clearinghouse at http://www.guideline.gov. The NQMC and NGC will be linked for those who wish to coordinate their search for both quality measures and guidelines.

New Contract -- Research Empowering America's Changing Healthcare System (REACHES) (+\$3,947,000)

AHRQ is requesting \$3,947,000 to develop new contracts designed to further the adoption of research findings into real-world practice and assessment of their impact in our main portfolio

areas. Historically, most health services research has focused on the Discovery and Dissemination phases of research, with the ultimate goal being publication in a peer-reviewed journal (see figure). This contract will focus on Adoption and Assessment. In the past, AHRQ's work on Translating Research Into Practice has sponsored grants for applied research to develop sustainable and replicable models and tools to improve the quality, outcomes, effectiveness, efficiency and cost effectiveness of health care and widely disseminating the



results of that research. In contrast, the proposed activities will

• Help identify tools and bodies of research within AHRQ's portfolios that are ready for wide-spread adoption and assessment to improve health and health care and achieve

measurable outcomes (this includes the Health Plan Learning Collaborative program, designed to assist health plans in reducing disparities in care and outcomes);

- Identify areas within the portfolios where additional research is needed in order to be ready for adoption;
- Summarize existing research into adoption-amenable formats;
- Assess the extent to which existing efforts to synthesize complex information and make research-based recommendations (including best practices) have been adopted, and develop plans to further their wide-spread adoption and assess the impact on quality and disparities in care;
- Identify and summarize what is known about methods for encouraging the wide-spread
 adoption of research findings in order to improve health and health care and achieve
 measurable outcomes, including what individual practitioners (e.g., physicians, hospital
 administrators, health plan administrators, policymakers) regard as adequate evidence
 for changing their practice, and the methods, formats, and partners through which they
 would like to receive such information.

REACHES will emphasize the areas identified as opportunities for improvement in the National Healthcare Quality Report and the National Healthcare Disparities Report.

<u>Performance Goals for General Non-Patient Safety Contracts and IAAs</u>: AHRQ's non-patient safety contracts and IAAs are directly linked to three of our strategic outcome goals.

- AHRQ Goal 1. Safety/Quality. Improve health care safety for all Americans through evidence-based research and translation and to build capacity to improve the quality of health care for Americans.
- AHRQ Goal 2. Efficiency. Develop strategies to improve access, foster appropriate use, and reduce unnecessary expenditures.
- AHRQ Goal 3. Effectiveness. Translate, disseminate, and implement research findings that improve health care outcomes.

Each specific contract and IAA is then further divided into one of 11 portfolios of work. Each portfolio of work also has outcome and output goals. Please see the section, beginning on page 11 that provides goals by portfolio of work.

III - Research Management (+\$1,900,000)

In FY 2005, AHRQ requests an increase of \$1,900,000 for research management costs. These funds will provide for current services, including amortization of the FY 2004 pay raise, the FY 2005 pay raise, and inflation. This Request includes \$907,000 to support the Unified Financial Management System (UFMS). The UFMS will be implemented to replace five legacy accounting systems currently used across the Operating Divisions.

<u>Performance Goals for Research Management</u>: AHRQ's research management goals are directly linked the following strategic outcome goals.

 AHRQ Goal 4. Organizational Excellence. Develop efficient and responsive business processes.

Organizational Excellence Portfolio Budget & Performance Integration			
FY Targets Actual Reference Performance			
FY 2005 Planning System - Implement additional phases.			
Conduct follow-up reviews of the PARTs			

Medical Expenditure Panel Survey (MEPS)

	FY 2003 Actual	FY 2004 Enacted	FY 2005 Request	Increase or Decrease
Total BA PHS Eval	\$0	\$0	\$0	\$0
PHS EVAI	(\$53,300,000)	(\$55,300,000)	(\$55,300,000)	(+\$0)
FTE	NA	NA	NA	NA

Data Development Portfolio

The MEPS is the only national source for annual data on how Americans use and pay for medical care. It supports all of AHRQ's research related strategic goal areas. The survey collects detailed information from families on access, use, expense, insurance coverage and quality. Data are disseminated to the public through printed and web-based tabulations, micro data files and research reports/journal articles.

The data from earlier surveys (1977 and 1987) have quickly become a linchpin for the nation's economic models and their projections of health care expenditures and utilization. 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, as well as estimates of who benefits and who bears the cost of a change in policy. No other surveys provide 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. Government and non-governmental entities rely upon these data to evaluate health reform policies, the effect of tax code changes on health expenditures and tax revenue, and proposed changes in government health programs such as Medicare. In the private sector (e.g., RAND, Heritage Foundation, Lewin-VHI, and the Urban Institute), these data are used by many private businesses, foundations and academic institutions to develop economic projections. These data represent a major resource for the health services research community at large. Since 2000, data on premium costs from the MEPS Insurance Component have been used by the Bureau of Economic Analysis to produce estimates of the GDP for the nation. In addition, the MEPS establishment surveys have been coordinated with the National Compensation Survey conducted by the Bureau of Labor Statistics through participation in the Inter-Departmental Work Group on Establishment Health Insurance Surveys.

A. Survey Components

Household Component (HC) of MEPS

The HC collects data on approximately 15,000 families and 39,000 individuals across the nation, drawn from a nationally representative sub-sample of households that participated in the prior year's National Center for Health Statistic's 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 non-institutionalized population of the US 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 two 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.

Medical Provider Component (MPC) of MEPS

The MPC covers approximately 4,000 hospitals, nearly 22,000 physicians, and 700 home health care providers, and 9,000 pharmacies. 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) of MEPS

The IC consists of two sub-components, 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.

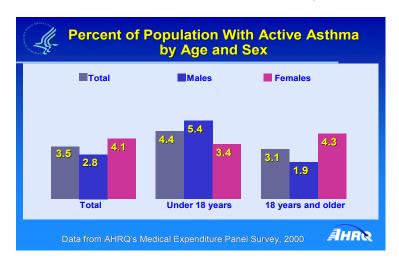
The list sample consists of a sample of approximately 40,000 business establishments and governments throughout the US. From this survey, national, regional, and state-level estimates, for approximately 40 states each year, can be made of the amount, types, and costs of health insurance available to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

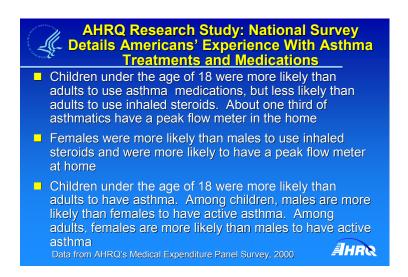
B. Accomplishments

The first MEPS data (from 1996) became available in April 1997, and key findings are summarized in the table provided on page 69. This rich data source has become not only more comprehensive and timely, but MEPS' new design has enhanced analytic capacities, allowed for longitudinal analyses, and developed greater statistical power and efficiency. During the last few years, AHRQ has developed a series of Statistical Briefs using MEPS data. These briefs, released on the MEPS website, provide timely statistical estimates on topics of current interest to policymakers, medical practitioners and the public at large. During 2003, topics included smoking, asthma treatment, trends in antibiotic use among children, expenditures, and insurance. For illustrative purposes, some of these findings are also presented in this section.

Future plans include the preparation of statistical briefs on prescribed medication use, obesity and continuing our briefs on the costs and characteristics of employer sponsored health insurance from the IC component.

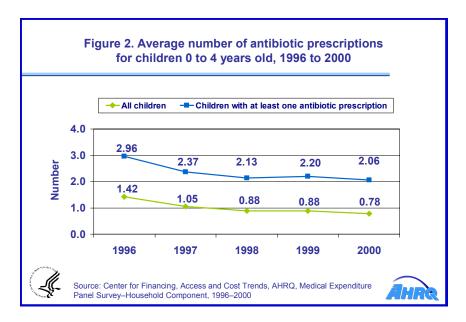
National Survey Detail Americans' Experiences with Asthma Treatment and Medications More than 25 million Americans have been told by a physician or other health care provider that they have asthma, according to data collected in 2000 by the Medical Expenditure Panel Survey. In the 12 months prior to their interview, 6.5 million adults and 3.2 million children had an asthma attack. Asthma is a chronic lung disease caused by inflammation of the lower airways and obstruction of airflow, and asthma attacks can vary from mild to life-threatening.





Trends in Antibiotic Use among U.S. Children Aged 0 to 4 Years, 1996-2000

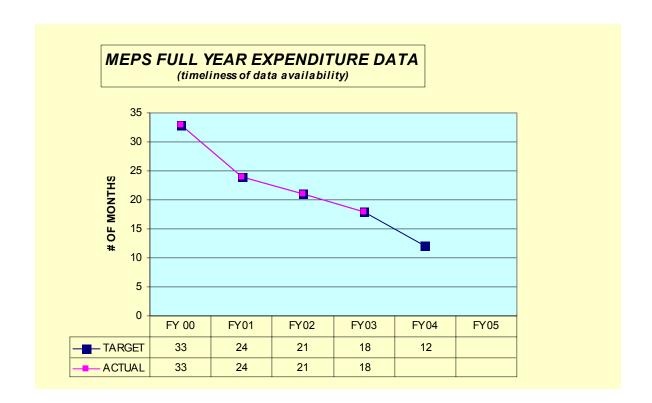
The majority of outpatient antibiotics in the United States are prescribed for respiratory tract infections, such as otitis media, bronchitis, and sinusitis, which are common ailments of young children. It is not surprising, therefore, that rates of antibiotic drug use are higher for young children than for any other age group and that trends in antibiotic use among young children are a major public health concern.



- The proportion of children aged 0 to 4 years that used at least one antibiotic during the year decreased from 47.9 percent in 1996 to 38.1 percent in 2000.
- The average number of antibiotic prescriptions decreased from 1.42 prescriptions per child in 1996 to 0.78 prescriptions per child in 2000.
- The average expenditure for antibiotics decreased from \$31.45 per child in 1996 (in CPI-adjusted 2000 U.S. dollars) to \$21.04 per child in 2000.
- Aggregate expenditures for antibiotics accounted for 53.8 percent of total drug spending by children in 1996 but accounted for 42.9 percent in 2000.

C. Performance Goals

Data Development Portfolio			
Performance Goal	FY Targets	Actual Performance	Reference
Insurance Component tables will be available within 6 months of collection Efficiency	FY 2005 – 7 months FY 2004 – 7 months FY 2003 – 7 months FY 2002 – 7 months FY 2001 – 7 months FY 2000 – 7 months	7 months 7 months 7 months 7 months	SG-4/5 HP-23
MEPS Use and Demographic Files will be available 12 months after final data collection Efficiency	FY 2005 – 12 months FY 2004 – 15 months FY 2003 – 17 months FY 2002 – 19 months FY 2001 – 23 months FY 2000 – 28 months	17 months 19 months 23 months 28 months	SG-4/5 HP-23
Full Year Expenditure Data will be available within 12 months of end of data collection Efficiency	FY 2005 – 12 months FY 2004 – 12 months FY 2003 – 18 months FY 2002 – 21 months FY 2001 – 24 months FY 2000 – 33 months	18 months 21 months 24 months 33 months	SG-4/5 HP-23
Increase the number of topical areas included in the MEPS Tables Compendia	FY 2005 Add Access Tables FY 2004 Add Quality Tables		SG-4/5 HP-23
Increase the number of MEPS Data Users	Establish baseline on: • # of web hits on MEPS-net IC/HC • # of web hits on MEPS-HC Tables Compendia • # of data center users		SG-4/5 HP-23



D. Funding History

Funding for the MEPS program during the last five years has been as follows:

	Budget	PHS	
_	Authority	Evaluation Funds	<u>Total</u>
2001 Actual	_	\$40,850,000	\$40,850,000
2002 Actual	_	\$48,500,000	\$48,500,000
2003 Actual	_	\$53,300,000	\$53,300,000
2004 Enacted	_	\$55,300,000	\$55,300,000
2005 Request	_	\$55,300,000	\$55,300,000

E. Rationale for the FY 2005 Request

The FY 2005 Request for the Medical Expenditure Panel Surveys (MEPS) totals \$55,300,000 in PHS evaluation funds, maintaining the level provided in the FY 2004 Enacted level. These funds will be used to maintain enhancements to the sample size and content of the MEPS Household and Medical Provider Surveys necessary to satisfy the congressional mandate to submit an annual report on national trends in health care quality and to prepare an annual report on health care disparities. The MEPS Household Component sample size is maintained at 15,000 households in 2005 with full calendar year information. These sample size specifications for the MEPS permit more focused analyses of the quality of care received by special populations due to significant improvements in the precision of survey estimates. This design, in concert with the survey enhancements initiated in prior years, significantly enhances AHRQ's capacity to report on the quality of care Americans receive at the national and regional

level, in terms of clinical quality, patient satisfaction, access, and health status both in managed care and fee-for-service settings.

These funds will also permit the continuation of an oversample in MEPS of Asian and Pacific Islanders and individuals with incomes <200% of the poverty level in MEPS. These enhancements, in concert with the existing MEPS capacity to examine differences in the cost, quality and access to care for minorities, ethnic groups and low income individuals, will provide critical data for the National Healthcare Quality Report and the National Healthcare Disparities Report. The request also covers cost of living increases to maintain enhancements made to the MEPS Insurance Component list sample, both in terms of sample size and improvements in the collection of information from employers about health insurance offerings and costs for their employees.

The funds for MEPS in FY 2005 will also help maintain the usability and timeliness of MEPS data through several activities. Work would continue on the implementation of improvements to the MEPS computer assisted interview programs (CAPI) for the Household instrument. These CAPI modifications are essential to support improvements in the timeliness, content, and quality of data, especially those data elements that are required for the National Healthcare Quality Report and the National Healthcare Disparities Report. Improvements in the timeliness of data development activities associated with the production of MEPS public use tapes will be implemented. Funds will also be allocated to the list sample of the MEPS Insurance Component to improve the availability of data to the States. The IC consists of two sub-components, the household sample and the list sample. In FY 2005, the MEPS Insurance Component employer survey linked to the household sample will not be conducted. In prior years, the data obtained, 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.

MEPS Products

	MILPO FIOUUCIS			
Product	Significance			
MEPS Household Component	Full year household component has been released for 1996 –1999 Partial data has been released for 2000-2001			
Component	Key Findings: 2001			
	• In the first half of 2001, 16.7 percent of the U.S. civilian noninstitutionalized population were uninsured.			
	 Among the U.S. civilian noninstitutionalized population under 65, more than a third of Hispanics (37.7 percent) and 20.2 percent of black non-Hispanics were uninsured during the first half of 2001, compared with 14.9 percent of white non-Hispanics. 			
	 Among people under 65, Hispanics accounted for one-fourth (26.3 percent) of the uninsured civilian noninstitutionalized population even though they represented only 13.1 percent of the overall population this age. 			
	 Young adults ages 19-24 were the age group at the greatest risk of being uninsured, with one-third (33.9 percent) of this group lacking health insurance. 			
	Key Findings: 2000			
	• In the first half of 2000, 16.1 percent of the U.S. civilian noninstitutionalized population were uninsured.			
	 Among the U.S. civilian noninstitutionalized population under 65, more than a third of Hispanics (35.2 percent) and 23.2 percent of black non-Hispanics were uninsured during the first half of 2000, compared to only 14.2 percent of white non-Hispanics. 			
	 Among people under 65, Hispanics accounted for one fourth (24.9 percent) of the uninsured civilian noninstitutionalized population even though they represented only 12.9 percent of the overall population for this age. Young adults aged 19-24 were the age group at the greatest risk of being uninsured, one-third (33.1 percent) of this group were lacking health 			
	insurance.			
	Key Findings: 1999			
	 In the first half of 1999, 15.8 percent of all Americans were uninsured. Among Americans under 65, 36 percent of Hispanics and 21 percent of blacks were uninsured during the first half of 1999, compared with only 14 percent of whites. 			
	 Even though Hispanics represented only 13 percent of the non-elderly U.S. population, they accounted for a fourth (25 percent) of the entire uninsured population. 			
	 Young adults ages 19-24 were more at risk of being uninsured than any other age group. Almost a third (32 percent) of young adults were uninsured. 			
	 During the first half of 1999, among people under age 65, those who were separated from their spouse were more likely to be uninsured (33 percent) 			

Product	Significance			
Toduct	than people of any other marital status.			
	Key Findings: 1998			
	 About 84% of the U.S. community population had medical expenses, and 			
	the mean expense per person with expenses was \$2,444			
	Among those under 65, 82.1 percent of Americans had public or private			
	insurance coverage			
	 Among adults under 65, married persons were more likely to have health insurance 			
	Over one half of elderly Americans were covered by private insurance;			
	more than 4 in 10 held only public coverage (Medicare with or without			
	Medicaid). This represents a decline in private coverage from 1997 and			
	an increase in public coverage			
	 Less than half of all Hispanic Americans and about half of black Americans were covered by private health insurance, compared to three quarters of 			
	whites.			
	 Close to a third (31.8%) of Hispanics and a fifth of blacks were uninsured. 			
	In contrast only 12 percent of whites were without insurance.			
	Wass Findings 4007			
	 Key Findings: 1997 During the first half of 1997, nearly 30% of children under age 4, one in four 			
	During the first half of 1997, nearly 30% of children under age 4, one in four children ages 4-6, and close to one in five children ages 7-12 had public			
	health insurance coverage.			
	 Young adults (19-24) were most likely to lack health insurance. Over a 			
	third of young adults (34.6%) were uninsured.			
	78.7% of workers were covered by private health insurance, compared to			
	half of individuals who were not employed.			
	 Among all racial/ethnic groups, Hispanic males were the most likely to be uninsured; 36.9% lacked coverage. 			
	dillistied, 30.9 // lacked coverage.			
	Key Findings 1996			
	 Inpatient hospital care accounts for nearly 4 of 10 dollars spent on health 			
	care; Prescribed medications account for about 13 % of total expenditures.			
	About 86% of the US civilian population had health care expenses. While the guarage expense was \$2.20% per capita, half of all people had.			
	the average expense was \$2,398 per capita, half of all people had expenses under \$559.			
	 19.6% of privately insured children in single-parent families get health 			
	insurance coverage from a policyholder not residing in their household.			
	 Almost 53% of children covered by Medicaid have at least one parent that 			
	works.			
	A greater percentage of workers are being offered health insurance by their			
	employers in 1996 than in 1987; however, a smaller proportion is accepting			
	 insurance. Nearly 18% of the population had no usual source of health care in 1996 			
	and about 12% of families reported barriers to receiving needed health			
	services.			
	• In 1996, 77.5% of children with a usual source of health care had at least			
	one ambulatory visit, compared to 43.3% of those without a usual source of			
	care			

care.

Product	Significance
	 Indicative of higher health care utilization rates during the last months of life, the average number of ambulatory visits for persons who died is about 2.5 higher than the rest of the population. Only 43.2% of the population received dental care in 1996.
MEPS Insurance	Tables of estimates are available for 1996 through 2000 MEPS-IC data are used in the calculation of Gross Domestic Product.
Component	 Key Findings: 2000 Private-sector The average health insurance premiums in 2000 were \$2,655 (for single coverage) and \$6,772 (for family coverage). Premiums increased 14.2% and 11.8% respectively over 1999, continuing a trend of increasing premiums each year since 1996. The average employee contributions to the health insurance premiums in 2000 were \$450 (for single coverage) and \$1,614 (for family coverage). Employee contributions increased 7.1% and 12.2% respectively over 1999, continuing the trend from previous years. The percent of the premiums paid by employees for health insurance coverage in 2000 changed slightly from prior years. (Single contributions went down 1.2 percentage points, family contributions did not significantly change.) It appears that employers in 2000 continue to share the premium increases with their employees at approximately the same ratio as they did in 1996 through 1999. While premiums increased for all types of health insurance plans, those plans that allow enrollees to go to any provider (i.e. a conventional indemnity plan) continue to have the highest premiums and the largest percentage increase over the previous year. Exclusive-provider plans continue to have the lowest premiums and smallest percentage increases over the previous year. Conventional indemnity plans continue to disappear at a significant rate each year. Now only 15% of establishments offer such a plan. Plans that offer a mixture of providers (i.e. PPO types) are still growing in popularity and are the primary type of plan now being offered by most employers. The percent of establishments offering exclusive-provider plans remained constant for another year. The percent of establishments offering health insurance in 2000 was 59.3%, up from 52.9% in 1996. From 1996 to 1998, the percentage of establishments offering health insurance increased from 21.5% to 32.4%. From 1998 to 2000, this
	 Employers continue to drop offerings of health insurance to their retirees (both under and over 65 years old). In each year since we started measuring this in 1997, there has been a significant decline. Offerings to retirees under age 65 have dropped from 21.6% of establishments in 1997 to only 12.0% in 2000. Offerings to retirees 65 and older have dropped from 19.5% to 10.7% over the same period.

Product

Significance

- Premiums for single coverage were significantly higher than the national average in Connecticut (\$3,057), New York (\$2,956), and New Jersey (\$2,911). Single coverage premiums were below the national average in North Dakota (\$2,293), California (\$2,365), Colorado (\$2,450), Oregon (\$2,467), and Pennsylvania (\$2,467).
- Family premiums were significantly higher than the national average in New Jersey (\$7,592), New Hampshire (\$7,525), Massachusetts (\$7,341), Connecticut (\$7,292), Maryland (\$7,287) and Illinois (\$7,220). They were significantly below the national average in Mississippi (\$5,983), North Dakota (\$6,124), New Mexico (\$6,222), and California (\$6,227).

Key Findings: 2000 State and local governments

- The average health insurance premiums for State and local government employees in 2000 were \$2,855 (for single coverage) and \$6,657 (for family coverage). Premiums increased 10.4% and 10.0% respectively over 1999, continuing a trend of increasing premiums each year since 1996.
- The average contributions made by State and local government employees to their health insurance premiums in 2000 were \$251 (for single coverage) and \$1,267 (for family coverage). Employee contributions increased 19.0% and 11.6% respectively over 1999.
- The largest average health insurance premiums were in New England (\$3,441 single / \$8,676 family) and the lowest were in the West South Central for single coverage (\$2,531) and in the Pacific for family coverage (\$6,065).
- The largest employee contributions paid by government employees for single plans were also in New England (\$399). However, the largest employee contributions for family plans were in the West South Central Census division (\$2,700). This was unchanged from the findings in 1999.
- There are strong regional differences in the way that State and local governments subsidize single versus family employee contributions to health insurance. In four of the Census divisions, (New England, Middle Atlantic, East North Central, and Pacific), the <u>percentage</u> of the premium paid by employees for both single and family coverage are similar, or slightly higher for family coverage. In the other five Census divisions (West North Central, South Atlantic, East South Central, West South Central and Mountain), employees pay a much higher percentage of the cost for family coverage. This trend has consistently appeared in all five years of the MEPS-IC survey. Similar regional trends occur in the private-sector, but are much more pronounced in the public-sector estimates.
- The percent of governments offering a choice of plans dropped from 34.7% in 1999 to 27.3% in 2000. This follows an upward trend in plan choice from 1996 through 1998 and a year of no change in 1999.

Product	Significance
	 The types of health insurance coverage offered by State and local governments remained consistent from 1999 to 2000, with one significant change. Managed care is still well entrenched in the government workplace - with 85.8% of governments offering some type of managed care plan. Preferred provider plans (offered by 67.7% of the governments) are more common than exclusive provider plans (offered by 29.0% of the governments). The percent of governments offering exclusive provider plans dropped significantly from 1999, when 34.2% were offering this type of plan. Led primarily by smaller State and local governments, the percentage of governments offering health insurance to their retirees under age 65 continues to drop rapidly - from 39.1% in 1999 to 29.9% in 2000. Likewise, offerings to retirees 65 and older also dropped - from 31.6% in 1999 to 21.6% in 2000.
MEPS Resource Center	Beginning in 2000, MEPS Household Survey data not available for broad public distribution are available to researchers and others with approved projects on site at AHRQ. Data are used in a tightly controlled, supervised environment. Permits more use of the data by a broad range of users.
MEPS Workshops	Since 1999, MEPS staff have provided training in how to use this data to nearly 650 researchers and policy makers. These sessions have ranged from 3 hour seminar style presentations to 2 day hands-on practical learning situations. While most of these seminars have been in the Washington DC metro area, we have also conducted workshops in Georgia, Massachusetts, California and Illinois.

Program Support

	FY 2003 Actual	FY 2004 Enacted	FY 2005 Request	Increase or Decrease
Total BA PHS Eval	\$0	\$0	\$0	\$0
FIIS Eval	(\$2,700,000)	(\$2,700,000)	(\$2,700,000)	(+\$0)
FTE	22	22	22	0

Organizational Excellence Portfolio

A. Purpose and Method of Operation

This activity supports the overall direction and management of the AHRQ. This includes the formulation of policies and program objectives; and administrative management and services activities.

B. Administrative Consolidation/Delayering

The Agency for Healthcare Research and Quality (AHRQ) continues to work towards efficiencies in the areas of administrative consolidation, strategic workforce planning, as well as organizational delayering. Utilizing the experience of a national leader in the field of health services research, Dr. Clancy, Director, AHRQ, and senior AHRQ leadership, crafted an organizational structure which will allow for a greater emphasis on translational activities related to the Agency's core business while also ensuring the Agency is responsive to the President's Management Agenda and Departmental goals and objectives. This paradigm shift in how the Agency does business will concentrate resources on mission critical activities and overall performance issues.

The principles which still guide the systematic evolution of the Agency include:

- An organizational structure that stresses simplified, shared decision-making;
- · Avoidance of redundancies in administrative processes;
- Ensuring clear lines of communication and authority;
- A strong emphasis on employee involvement in all Agency matters; and
- Recognizing and rewarding employee accomplishments and contributions to the AHRQ's mission.

The new Agency structure reduces the number of organizational components from 10 to eight and has created a flattened organizational structure which will allow us to achieve a 1:15

supervisor/employee ratio encouraged by the Department. This modification allows for Office synergy in the areas of performance, budgeting, and accountability; review, education and priority populations; as well as knowledge transfer and communications. The elimination of one research component will focus the remaining Centers on improving information for policymakers and legislators on healthcare access, economic trends and system financing; devising strategies to improve the efficiency of the health care system; improving the effectiveness and outcomes of care through the use of evidence based clinical information by patients and providers; improving the quality and safety of healthcare; and increasing consumer and patient use of healthcare information, as well as a strategic focus on primary care.

Based on the new structure, senior leadership is working collaboratively to evaluate the current and future needs of the Agency with a focus on redeploying current AHRQ staff to support critical flagship programs while also becoming more "citizen centered" in its approach on how business is conducted.

The Agency is also proactive in its efforts with regard to A-76 (Competitive Sourcing) and has a renewed focus on business process reviews of administrative functions which will assist us to streamline and eliminate redundancies where possible while also working towards the Department's goal of a 15 percent reduction in administrative management.

In addition to the changes to the overall organizational structure, AHRQ is also in the process of implementing a matrix management model of program development that focuses on outcomes rather than outputs. This approach will allow for collaboration across Agency programs without the need for establishing unnecessary formal structures and management layers to support AHRQ research and dissemination activities.

There are several tangible benefits to this reorganization. First and foremost, it allows the Agency to emphasize its priority on transforming the health care system by effectively translating research findings and tools into practice for use by health care practitioners, the general public, and other users of AHRQ research. Secondly, the Agency will be able to integrate and align activities which typically functioned independently from one another (e.g., the budget and planning process) as well as consolidate administrative management functions. The Agency's new structure will also result in "horizontal delayering" and will allow decisions to be made more quickly and efficiently within AHRQ. Lastly, AHRQ's retooling of the organizational structure will allow us to eliminate at least two supervisory positions and continue the process of redeploying staff, when possible, from administrative management positions to positions deemed as mission-critical in nature.

The Agency's reorganization plan recently received approval from the Assistant Secretary for Administration and Management and aggressive measures are being taken to administratively implement this innovative model.

AHRQ continues to partner with the Department on HHS-wide activities including the Emerging Leaders Program. The Agency was successful in hiring two junior level staff to help support mission-critical functions in the areas of clinical informatics and bioterrorism. This effort, combined with other internal strategies for succession planning, will help to ensure a vital AHRQ workforce in successive years.

C. Performance Goals

Organizational Support Portfolio Strategic Management of Human Capital				
Performance Goal	FY Targets	Actual Performance	Reference	
By FY 2007, Get to Green on the President's Management Agency Initiatives Outcome Get to Green on Strategic Management of Human Capital Initiative	PY 2004 Develop a plan to recruit new or train existing staff to acquire skills necessary to fill identified gaps Continue to identify gaps in agency skills and abilities Continue to integrate competency models into organizational processes FY 2003 Identify gaps in agency skills and abilities Integrate competency models into organizational processes Finalize the identification of technical competencies Engage a consultant to evaluate options and develop a plan for vertically & horizontally collapsing organizations Continue to reduce organizational levels	Completed Completed Completed Completed Completed Completed # of organizational levels eliminated :2	SG-8	
	FY 2002 Develop a model for leadership and core competencies in AHRQ Reduce the Number of Managers Reduce Organizational Levels Redeploy Staff to Mission-Critical Positions	Completed - # of supervisory positions eliminated: 7 - # of organizational levels eliminated: 2 - # of administrative FTE's redeployed to support program		

D. Funding History

Funding for the Program Support during the last five years has been as follows:

	Budget <u>Authority</u>	PHS Evaluation <u>Funds</u>	FTEs
2001	2,585,000		22
2002	2,585,000		22
2003 Actual		2,700,000	22
2004 Enacted		2,700,000	22
2005 Request	<u></u>	2,700,000	22

E. Rationale for the FY 2005 Request

The FY 2005 Request for Program Support is maintained at the FY 2004 Enacted level. AHRQ will absorb increases for current services including mandatory increases for the annualization of the FY 2004 pay raise and the FY 2005 pay raise.