



**DEPARTMENT
of HEALTH
and HUMAN
SERVICES**

**Fiscal Year
2011**

**Agency for Healthcare
Research and Quality**

***Justification of
Estimates for
Appropriations Committees***

I am pleased to present the Agency for Healthcare Research and Quality's (AHRQ) FY 2011 Congressional Justification. We all benefit from safe, effective, and efficient health care. Our performance-based budget demonstrates our continued commitment to assuring sound investments in programs that will make a measurable difference in health care for all Americans. The Agency's mission is to improve the quality, safety, efficiency, and effectiveness of health care for all Americans. In support of this mission, AHRQ is committed to improving patient safety by developing successful partnerships and generating the knowledge and tools required for long-term improvement.



AHRQ continues to improve patient care through the Effective Health Care Program which conducts patient-centered health research. As authorized by the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA), this program has conducted a series of state-of-the-science reviews of existing scientific information on that compare the effectiveness of health care interventions, including prescription drugs. In addition to our FY 2011 Request, the American Recovery and Reinvestment Act appropriated \$1.1 billion for comparative effectiveness research. Of the \$1.1 billion, AHRQ transferred \$400 million to the National Institutes of Health and \$400 million is available for allocation at the discretion of the Secretary of DHHS. The FY 2011 Request includes a total of \$286 million to broaden patient-centered health research at AHRQ. One example of the power of this research is the results of a study funded through AHRQ's DEClDE (Developing Evidence to Inform Decisions about Effectiveness) research network - which is part of the agency's Effective Health Care Program. In March, 2009 the study reported that heart disease patients 65 and older who receive stents coated with medicine to prevent blockages are more likely to survive and less likely to suffer a heart attack than people fitted with stents not coated with medication. The findings provide important new evidence for decisionmaking by heart disease patients and their physicians. These results should help resolve lingering questions regarding the safety of drug-eluting stents in recent years.

AHRQ's work to improve patient care continues through our investments in research to eliminate hospital-acquired infections. Each year, an estimated 250,000 cases of central line-associated bloodstream infections occur in hospitals in the United States, leading to at least 30,000 deaths, according to the Centers for Disease Control and Prevention. The average additional hospital cost for each infection is over \$36,000, which totals over \$9 billion in excess costs annually. Central venous catheters or central line catheters are tubes placed into a large vein in a patient's neck, chest or groin to administer medication or fluids or to collect blood samples. The comprehensive safety program is designed to help ICU staff ensure patient safety, primarily through the use of a checklist. The program, which has been used successfully in more than 100 ICUs in Michigan, includes tools to help health care professionals identify opportunities to reduce potential health care-associated infections and implement policies to make care safer. Within 3 months of implementation in Michigan, the program helped reduce infection rates to zero in more than 50 percent of participating hospitals. In October 2008, AHRQ provided \$3 million to 10 States to implement a comprehensive unit-based patient safety program to help prevent infections related to the use of central line catheters. The States are California, Colorado, Florida, Massachusetts, Nebraska, North Carolina, Ohio, Pennsylvania, Texas, and Washington. In addition, the California Hospital Patient Safety Organization, the North Carolina Center for Hospital Quality and Patient Safety, and the Ohio Patient Safety Institute will participate in the project. Thus, results from this project can potentially improve care, save lives, and lead to substantial cost savings for participating hospitals and the health care system. In FY 2010, AHRQ plans to promote the implementation of these tools in all 50 States.

With our continued investment in successful programs that develop useful knowledge and tools, I am confident that we will have more accomplishments to celebrate. The end result of our research will be measurable improvements in health care in America, gauged in terms of improved quality of life and patient outcomes, lives saved, and value gained for what we spend.

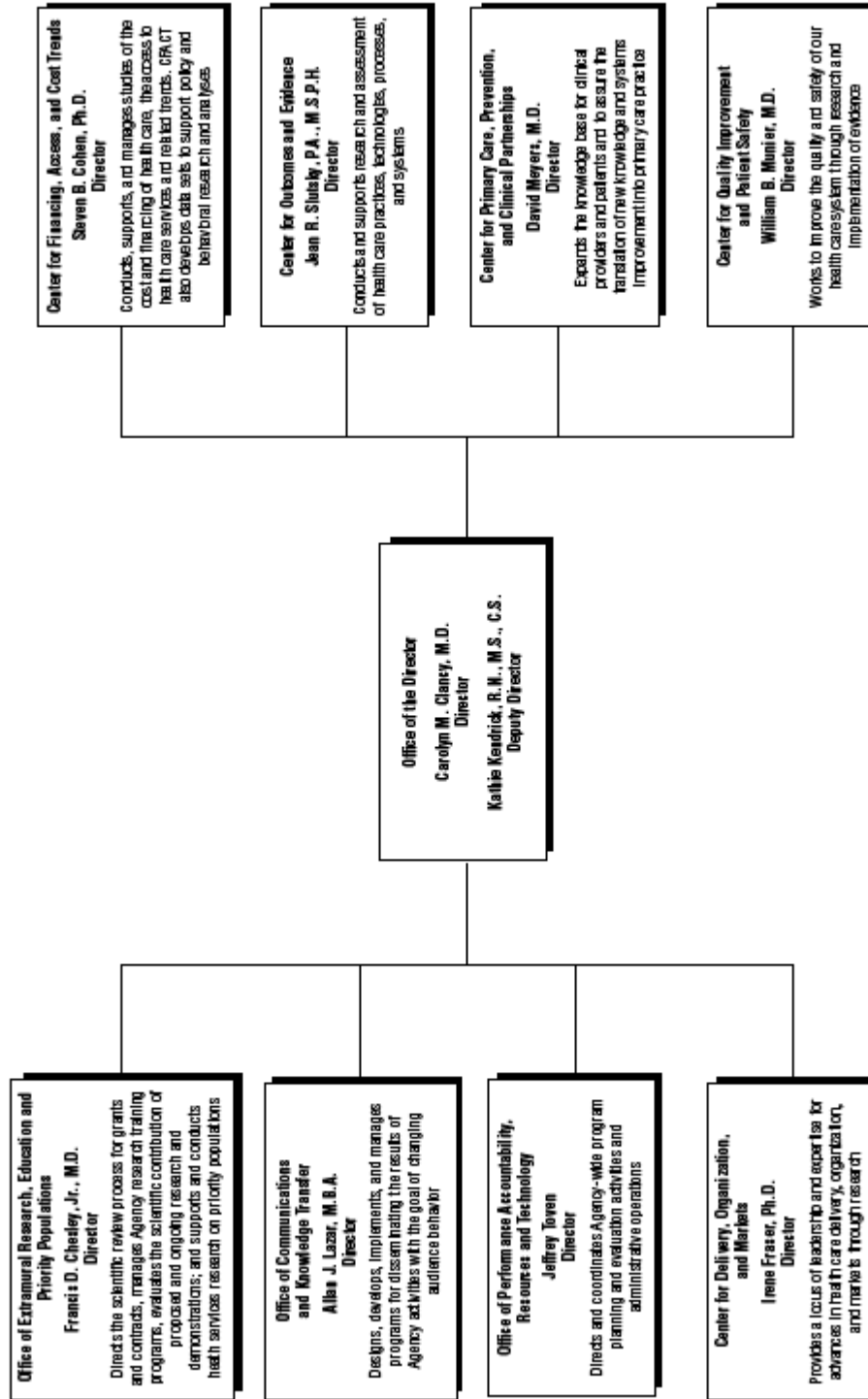
***Carolyn M. Clancy, M.D., Director
Agency for Healthcare Research and Quality***

Table of Contents

Letter from the Director	i
Table of Contents.....	ii
Organizational Chart.....	iv
<u>Performance Budget Overview</u>	
Introduction and Mission.....	1
Overview of AHRQ Budget Request.....	1
Discretionary All-Purpose Table	4
AHRQ Mechanism Table	5
Recovery Act Obligations and Performance	6
<u>Budget Exhibits</u>	
Appropriation Language.....	10
Amounts Available for Obligation.....	11
Summary of Changes	12
Budget Authority by Activity	14
Authorizing Legislation.....	15
Appropriations History.....	16
Appropriations Not Authorized by Law.....	17
<u>Narrative by Activity</u>	
Research on Health Costs, Quality, and Outcomes (HCQO)	18
<u>I. Patient-Centered Health Research</u>	
A. Program Description and Accomplishments.....	21
B. Funding History	24
C. Budget Request.....	25
D. Outputs and Outcomes Tables.....	32
E. Mechanism Table	33
<u>II. Prevention/Care Management</u>	
A. Program Description and Accomplishments.....	34
B. Funding History	41
C. Budget Request.....	41
D. Outputs and Outcomes Tables.....	43
E. Mechanism Table	45
<u>III. Value</u>	
A. Program Description and Accomplishments.....	46
B. Funding History	52
C. Budget Request.....	52
D. Outputs and Outcomes Tables.....	53
E. Mechanism Table	54

<u>IV. Health Information Technology</u>	
A. Program Description and Accomplishments.....	55
B. Funding History	60
C. Budget Request.....	61
D. Outputs and Outcomes Tables.....	62
E. Mechanism Table	63
<u>V. Patient Safety</u>	
A. Program Description and Accomplishments.....	64
B. Funding History	70
C. Budget Request.....	70
D. Outputs and Outcomes Tables.....	73
E. Mechanism Table	75
<u>VI. Crosscutting Activities Related to Quality, Effectiveness, and Efficiency Research</u>	
A. Program Description and Accomplishments.....	76
B. Funding History	91
C. Budget Request.....	91
D. Outputs and Outcomes Tables.....	95
E. Mechanism Table	97
Medical Expenditure Panel Survey (MEPS)	
A. Program Description and Accomplishments.....	98
B. Funding History	101
C. Budget Request.....	101
D. Outputs and Outcomes Tables.....	103
E. Mechanism Table	104
Program Support	
A. Program Description and Accomplishments.....	105
B. Funding History	108
C. Budget Request.....	108
D. Outputs and Outcomes Tables.....	109
<u>Supplementary Tables</u>	
Budget Authority by Object Class	112
Salaries and Expenses Table	113
Detail of Full-Time Equivalent Employment (FTE) Change	114
Detail of Positions	115
FY 2011 Enterprise Information Technology and Government-wide E-Gov Initiatives.....	116
<u>Significant Items</u>	
House Report No. 111-222	118
Senate Report No. 111-66.....	124
Consolidated Appropriation Conference Report, 2010	129

U.S. Department of Health and Human Services Agency for Healthcare Research and Quality



Performance Budget Overview

A. Introduction and Mission

As one of 12 agencies within the Department of Health and Human Services, the Agency for Healthcare Research and Quality (AHRQ) supports health services research initiatives that seek to improve the quality of health care in America. AHRQ's mission is to improve the quality, safety, efficiency, and effectiveness of health care for all Americans. The Agency works to fulfill this mission by conducting and supporting health services research, both within AHRQ as well as in leading academic institutions, hospitals, physicians' offices, health care systems, and many other settings across the country. The Agency has a broad research portfolio that touches on nearly every aspect of health care. AHRQ-supported researchers are working to answer questions about:

- Clinical practice.
- Outcomes of care and effectiveness.
- Evidence-based medicine.
- Primary care and care for priority populations.
- Health care quality.
- Patient safety/medical errors.
- Organization and delivery of care and use of health care resources.
- Health care costs and financing.
- Health care system and public health preparedness.
- Health information technology.

**To Improve the
Quality, Safety,
Efficiency and
Effectiveness of
Health Care for all
Americans**

The ultimate goal is to disseminate AHRQ's research findings to produce healthier, more productive individuals and an enhanced return on the Nation's substantial investment in health care.

B. Overview of AHRQ Budget Request

AHRQ's FY 2011 Request level totals \$610,912,000, an increase of \$213,859,000 over the FY 2010 Appropriation. The Request is all in PHS Act evaluation funds.

AHRQ has three budget activities: Research on Health Care Costs, Quality, and Outcomes (HCQO), the Medical Expenditure Panel Survey (MEPS), and Program Support (PS). The FY 2011 Request level for the HCQO budget activity totals \$478,899,000, an increase of \$208,246,000 from the FY 2010 Appropriation. MEPS continues to provide the only national source for annual data on how Americans use and pay for medical care. The FY 2011 Request level of \$59,300,000 provides an increase of \$500,000 over the FY 2010 Appropriation. Finally, Program Support is funded at \$72,713,000, an increase of \$5,113,000 from the FY 2010 level of \$67,600,000, to support the overall operation of the Agency.

Within the HCQO budget activity, AHRQ supports research related to five research priorities. These research portfolios include: Patient-Centered Health Research, Prevention/Care Management, Value Research, Health Information Technology, and Patient Safety. In addition, AHRQ supports Crosscutting Activities Related to Quality, Effectiveness

and Efficiency Research. Crosscutting Activities includes a variety of research projects that support all of our research portfolios. These activities include data collection, measurement, dissemination and translation, program evaluation, grant review support, and other crosscutting contracts. The FY 2011 Performance Budget is displayed using these priorities.

Program increases:

HCQO: Patient-Centered Health Research (+\$251,750,000): The FY 2011 Request level provides \$286,274,000 for Patient-Centered Health Research (\$272,750,000 in HCQO and \$13,524,000 in Program Support), an increase of \$261,218,000 overall (+\$251,750,000 over the FY 2010 Appropriation level for HCQO and an increase of +\$9,468,000 within Program Support). Patient-centered health research improves health care quality by providing patients and physicians with state-of-the-science information on which medical treatments work best for a given condition. At the FY 2011 Request level, AHRQ will provide increases in seven key activities: identification of new and emerging issues for patient-centered health research (+\$9.5M), evidence synthesis (+\$25.0M), evidence gap identification (+\$25.0M), evidence generation (+\$117.8M), translation and dissemination (+\$54.0M), training and career development (+\$8.5M), and a citizen forum (+\$12.0M). An additional \$2,250,000 is included in Program Support to provide salaries and benefits for an additional 15 FTEs needed to help implement this program.

HCQO: Health Information Technology (+\$3,877,000) : The FY 2011 Request level provides \$31,522,000 for Health IT research, an increase of \$3,877,000 over the FY 2010 Appropriation. Established in 2004, the purpose of the Health IT portfolio at AHRQ is to develop and disseminate evidence and evidence-based information tools to inform policy and practice on how health IT can improve the quality of American health care. Through grants and contracts, AHRQ and its partners work to improve the quality of health care by identifying challenges to health IT adoption and use, solutions, and best practices for making health IT work, and developing tools that will help hospitals and clinicians successfully incorporate new IT. A total of \$221,000 of the increase will be directed to grants, providing \$7,191,000 in new grant support for Health IT. The remaining \$3,656,000 of the increase will be directed to research contracts, including increased support to the National Resource Center for Health IT.

Medical Expenditure Panel Survey (MEPS) (+\$500,000): The FY 2011 Request provides \$59,300,000 for the MEPS, an increase of \$500,000 over the FY 2010 Appropriation. This increase will restore the MEPS to full analytic capacity and precision levels. The MEPS Household Component sample size is restored in 2011 to 14,500 households with full calendar year information. These sample size specifications for the MEPS permit detailed analyses of the health care expenditures, health insurance coverage, and the quality of care received by special populations meeting precision specifications for survey estimates.

Program Support (+\$5,113,000): The FY 2011 Request for Program Support is \$72,563,000, an increase of \$5,113,000 from the prior year. Of this increase, \$2,225,000 is provided for an additional 15 FTEs to support the Patient-Centered Health Research portfolio. In addition, the FY 2011 Request level provides \$1,600,000 for pay raise costs for AHRQ as a whole. An additional \$500,000 is provided in FY 2011 for required increases within AHRQ's budget, including rent increases, printing, and data costs. Finally, an additional \$763,000 is provided for

increases to the Service and Supply Fund (SSF) and other joint funding arrangements.

Program decreases:

HCQO: Patient Safety (-\$25,963,000) : The FY 2011 Request level provides \$64,622,000 for Patient Safety research, a decrease of \$25,963,000 from the FY 2010 Appropriation. AHRQ's patient safety research priority 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. In FY 2010, \$25,000,000 was allocated to a Medical Malpractice research program. The research grant program was funded using multi-year authority and no outyear costs are required in FY 2011. An additional reduction of \$963,000 is directed to patient safety contracts.

HCQO: Crosscutting Activities Related to Quality, Effectiveness, and Efficiency (-\$21,418,000): The FY 2011 Request level provides \$90,371,000 for Crosscutting Activities, a decrease of \$21,418,000 from the FY 2010 Appropriation of \$117,789,000. At the FY 2011 Request level, AHRQ will provide \$40,211,000 for grants, a decrease of \$14,533,000 from the FY 2010 Appropriation. The FY 2011 provides \$50,160,000 for contracts, a decrease of \$6,885,000 from the FY 2010 level. Within the overall decrease for contracts, AHRQ will provide an additional \$1.7 million for the Healthcare Cost and Utilization Project (HCUP). HCUP includes the largest collection of longitudinal hospital care data in the United States, with all-payer, encounter-level information beginning in 1988.

Discretionary All-Purpose Table

Discretionary All-Purpose Table Agency for Healthcare Research and Quality (dollars in thousands)

PROGRAM	FY 2009 Appropriations	FY 2009 Recovery Act 1/	FY 2010 Appropriation	FY 2011 President's Budget Request
RESEARCH ON HEALTH COSTS, QUALITY AND OUTCOMES				
Budget Authority.....	\$0	\$700,000	\$0	\$0
PHS Evaluation.....	<u>251,631</u>	<u>0</u>	<u>270,653</u>	<u>478,899</u>
Subtotal, HCQO.....	251,631	700,000	270,653	478,899
MEDICAL EXPENDITURES PANEL SURVEY				
Budget Authority.....	0	0	0	0
PHS Evaluation.....	<u>55,300</u>	<u>0</u>	<u>58,800</u>	<u>59,300</u>
Subtotal, MEPS.....	55,300	0	58,800	59,300
PROGRAM SUPPORT				
Budget Authority.....	0	0	0	0
PHS Evaluation.....	<u>65,122</u>	<u>0</u>	<u>67,600</u>	<u>72,713</u>
Subtotal, PROGRAM SUPPORT.....	65,122	0	67,600	72,713
SUBTOTAL				
Budget Authority.....	0	700,000	0	0
PHS Evaluation.....	<u>372,053</u>	<u>0</u>	<u>397,053</u>	<u>610,912</u>
TOTAL OPERATIONAL LEVEL.....	372,053	700,000	397,053	610,912
FTEs.....	289	38	300	315

1/ In FY 2009, the American Recovery and Reinvestment Act (ARRA) provided \$1,100,000,000 for research that compares the effectiveness of medical options. Of this total, \$400,000,000 was transferred to the National Institute of Health and a total of \$400,000,000 will be allocated at the discretion of the Secretary of the Department of Health and Human Services. A new Federal Coordinating Council helped set the agenda for these funds. The remaining \$300,000,000 was available for the AHRQ. These funds are available for obligation in FY 2009 and FY 2010. Of the 38 FTEs allocated for the ARRA funds, AHRQ is allocated 15 FTEs and the Office of the Secretary supports 22 FTEs with their ARRA funds.

AHRQ Mechanism Table

AGENCY FOR HEALTHCARE RESEARCH AND QUALITY
GRAND TOTAL Mechanism Table
(Dollars in Thousands)

	FY 2009 Actual		FY 2010 Appropriation		FY 2011 Request	
	<u>No.</u>	<u>Dollars</u>	<u>No.</u>	<u>Dollars</u>	<u>No.</u>	<u>Dollars</u>
RESEARCH GRANTS						
Non-Competing.....	185	53,170	216	64,439	207	75,431
New & Competing.....	194	38,374	217	63,638	155	123,084
Supplemental.....		0		0		0
TOTAL, RESEARCH GRANTS.....	379	91,544	433	128,077	362	198,515
TOTAL CONTRACTS/IAAs.....		215,387		201,376		339,684
RESEARCH MANAGEMENT.....		65,122		67,600		72,713
TOTAL.....		372,053		397,053		610,912

Recovery Act Obligations and Performance

The American Recovery and Reinvestment Act (Recovery Act) appropriated \$1.1 billion for research that compares the effectiveness of different medical options of which \$300 million is for the Agency for Healthcare Research and Quality (AHRQ), \$400 million is for the National Institutes of Health (NIH), and \$400 million is for allocation at the discretion of the Secretary of the Department of Health and Human Services (HHS). This summary will focus on the \$300 million for AHRQ and the \$400 million for the Office of the Secretary.

AHRQ's Research Activities (\$300 million)

AHRQ will use Recovery Act funds to expand and broaden existing activities through its Effective Health Care (EHC) program. These activities were initiated at the agency in response to the Medicare Prescription Drug, Improvement and Modernization Act of 2003. AHRQ will use a process to generate and bolster this research that includes: horizon scanning, evidence gap identification, evidence synthesis, evidence generation, dissemination and translation, and research training and career development. AHRQ will also use Recovery Act funding to expand and standardize public involvement in its EHC program by establishing a Citizens Forum. The comprehensive spending plan transmitted to specified Congressional committees on July 30, 2009 represents an investment in creating the integrated components of a national effort in the United States, including the first coordinated prospective pragmatic clinical studies program for research that compares the effectiveness of different medical options. Additional ARRA investments will support the infrastructure, methods, and capacity necessary to sustain a vigorous national research enterprise in the United States. Proposals for funds will focus initially on the 14 priority conditions established by the Secretary of HHS under Section 1013 of the 2003 Medicare Modernization Act (see <http://www.ahrq.gov/clinic/epcpartner/epcpartner2.htm>). Priority will also be given to research focused on under-represented populations. To achieve the goals of producing patient-centered health research, AHRQ will use a variety of funding mechanisms including grants, contracts and inter-agency agreements. Award recipients will include researchers, academic institutions, States, community-based organizations, national organizations, and federal agencies.

The Office of the Secretary (OS) Research Activities (\$400 million)

The HHS's overall goal for this investment is to promote high quality care through broad availability of information that helps clinicians and patients match the best science to individual needs and preferences. Moreover, the investment can build a sustainable foundation for future research so that it will enable -- now and in the future -- the United States healthcare system to deliver the highest quality care to all Americans. The Recovery Act established the Federal Coordinating Council (FCC) to foster optimum coordination of this research by relevant Federal departments and agencies, with the goal of reducing duplicative efforts and encouraging coordinated and complementary use of resources.

The Recovery Act funds represent a significant investment in research that compares the effectiveness of different medical options, allowing many high-priority issues to be addressed in the short-term, but also strengthening and sustaining this research in the long-term. As such, if we are to realize the full potential of this research to improve health and health care, we must be equally strategic about the direction moving forward. Evidence needs for this research will be identified through syntheses of existing evidence as well as horizon scanning (which will include public outreach and consultation). These identified

needs will inform development of priorities for evidence generation across HHS operational and staff divisions. As appropriate, these priorities will incorporate cross-cutting needs relating to priority interventions, conditions and populations.

AHRQ Summary of Recovery Act Obligations and Performance
(dollars in millions)

ARRA Implementation Plan	Appropriated Amount	FY 2009	FY 2010	FY 2009 – FY 2010
AHRQ	\$300.0	\$4.9	\$295.1	\$300.0
Office of the Secretary	\$400.0	\$1.6	\$398.4	\$400.0
Total Obligations	\$700.0	\$6.5	\$693.5	\$700.0

Selected Performance Measures

AHRQ 1/

	Performance Measure	FY 2009 Actuals	FY 2010 Target 2/
AHRQ ARRA 1	Increase the number of Effective Health Care (EHC) Program products available for use by clinicians, consumers, and policymakers	N/A (data to be reported beginning Q1 FY2010)	5 – 15 Research Reviews or Research Gap Reports and 5 – 7 translation and education products
AHRQ ARRA 2	Increase the dissemination of Effective Health Care (EHC) Program products to clinicians, consumers, and policymakers to promote the communication of evidence about the effectiveness of different medical interventions	N/A (data to be reported beginning Q1 FY2010)	Establish baseline and set targets for 2011 and beyond
AHRQ ARRA 3	Increase the percentage of stakeholders who report they use Effective Health Care (EHC) Program products as a resource	N/A (data to be reported beginning Q1 FY2010)	Establish baseline and set targets for 2011 and beyond
AHRQ ARRA 4	Number of competitive contracts and grants awarded to support AHRQ's Recovery Act research activities	1 grant; 3 contracts	8 contracts to date; FY 2010 Total Estimate: 19 contracts 75 grants

Note: Targets reflect activities funding with the ARRA Appropriation and are in addition to the performance targets for AHRQ's annual appropriation provided in the Patient-Centered Health Research portfolio section.

1/ Additional information about this implementation plan is contained at http://www.hhs.gov/recovery/reports/plans/ahrq_cer_plan.pdf

2/ These are preliminary targets for ARRA. They are under review and are subject to change.

Data Sources for AHRQ:

AHRQ ARRA 1	AHRQ's Recovery Act-funded products will be posted on the AHRQ Effective Health Care Program Web site, http://effectivehealthcare.ahrq.gov/ .
AHRQ ARRA 2	Requests for copies of AHRQ's Recovery Act-funded products (ordered by title and publication number) will be made to the AHRQ Publications Clearinghouse. Data will be provided bi-annually from the Publications Clearinghouse on the number of organizations requesting more than 50 copies of AHRQ's Recovery Act-funded products.
AHRQ ARRA 3	Data for this output is available from AHRQ's Medicaid Medical Director's Learning Network (MMDLN). At an annual meeting, members of MMDLN will report on how they use AHRQ's Recovery Act-funded products.
AHRQ ARRA 4	UFMS Accounting Data, AHRQ Budget Database, and HHS Financial and Activity Report.

Office of the Secretary 3/

	Performance Measure	FY 2009 Actuals	FY 2010 Target
OS ARRA 1	Number of Federal Coordinating Council Meetings	13	2
OS ARRA 2	Number or people and organizations who provided written or verbal comments for Council's consideration	412	10

Note: The current OS ARRA measures focus on the FCC, whose work was designed to be heaviest in FY 2009. Therefore, the FY 2010 targets are lower than the FY 2009 Actuals.

3/ Additional information about this implementation plan is contained at http://www.hhs.gov/recovery/reports/plans/os_cer_plan.pdf

Data Source: Office of the Secretary Staff.

Budget Exhibits

Budget Exhibits

Appropriation Language..... 10
Amounts Available for Obligation..... 11
Summary of Changes 12
Budget Authority by Activity 14
Authorizing Legislation..... 15
Appropriations History..... 16
Appropriations Not Authorized by Law..... 17

Appropriation Language

Agency for Healthcare Research and Quality

Healthcare Research and Quality

For carrying out Titles III and IX of the Public Health Service Act (“PHS Act”), part A of Title XI of the Social Security Act, and section 1013 of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, amounts received from Freedom of Information Act fees, reimbursable and interagency agreements, and the sale of data shall be credited to this appropriation and shall remain available until expended: *Provided*, That the amount made available pursuant to section 937(c) of the PHS Act shall not exceed [~~\$397,053,000~~] \$610,912,000.

Amounts Available for Obligation

DEPARTMENT OF HEALTH AND HUMAN SERVICES
AGENCY FOR HEALTHCARE RESEARCH AND QUALITY

	<u>Amounts Available for Obligation 1/</u>		
	<u>2009 Actual</u> 2/	<u>FY 2010</u> <u>Estimate</u>	<u>FY 2011</u> <u>PB</u>
Appropriation:			
Supplemental (P.L. 111-5) 3/.....	\$1,100,000,000	\$0	\$0
Transfer of Funds to NIH.....	-\$400,000,000	\$0	\$0
	<hr/>	<hr/>	<hr/>
Subtotal, adjusted appropriation.....	\$700,000,000	\$0	\$0
Offsetting Collections from:			
Federal funds pursuant to Title IX of P.L. 102-410, (Section 937(c) PHS Act)			
HCQO.....	\$251,631,000	\$270,653,000	\$478,899,000
MEPS.....	\$55,300,000	\$58,800,000	\$59,300,000
Program Support.....	\$65,122,000	\$67,600,000	\$72,713,000
	<hr/>	<hr/>	<hr/>
Subtotal, adjusted appropriation.....	\$372,053,000	\$397,053,000	\$610,912,000
Unobligated Balance Lapsing.....	<u>(\$452,818)</u>	<hr/> ---	<hr/> ---
Total obligations.....	\$1,071,600,182	\$397,053,000	\$610,912,000

- 1/ Excludes funding from other HHS operating divisions provided through reimbursable agreements.
- 2/ Reflects actual obligations. Excludes obligations from other reimbursable funds.
- 3/ In FY 2009, the American Recovery and Reinvestment Act (ARRA) provided \$1,100,000,000 for research that compares the effectiveness of medical options. Of this total, \$400,000,000 was transferred to the National Institute of Health and a total of \$400,000,000 will be allocated at the discretion of the Secretary of the Department of Health and Human Services. A new Federal Coordinating Council helped set the agenda for these funds. The remaining \$300,000,000 was available for the AHRQ. These funds are available for obligation in FY 2009 and FY 2010. Of the 38 FTEs allocated for the ARRA funds, AHRQ is allocated 15 FTEs and the Office of the Secretary supports 22 FTEs with their ARRA funds.

Summary of Changes

2010 Appropriation	\$ -0-
(Obligations)	(\$397,053,000)
2011 Estimate	\$ -0-
(Obligations)	(\$610,912,000)
Net change	\$ -0-
(Obligations)	(+213,859,000)

	<u>2010 Current</u>		<u>Change from Base</u>	
	<u>Budget Base</u>		<u>Budget</u>	
	<u>(FTE)</u>	<u>Authority</u>	<u>(FTE)</u>	<u>Authority</u>
<u>Increases</u>				
A. <u>Built-in:</u>				
1. Annualization of 2010 pay raise	--	--	--	--
	(--)	(44,909,000)	(--)	(+230,000)
2. January 2011 pay raise	--	--	--	--
	(--)	(44,909,000)	(--)	(+1,369,000)
3. Rental Payments to GSA.....	--	--	--	--
	(--)	(4,254,000)	(--)	(+58,000)
4. Service and Supply Funds & JFA			--	--
			(--)	(+763,000)
5. Inflation Costs on Other Objects			--	--
			<u>(--)</u>	<u>(+442,000)</u>
Subtotal, Built-in.....			--	--
			(--)	(+2,863,000)
B. Program:				
HCQO				
1. Patient-Centered Health Research.....	--	--	--	--
	(--)	(\$21,000,000)	(--)	(+251,750,000)
2. Health Information Technology.....	--	--	--	--
	(--)	(\$27,645,000)	(--)	(+3,877,000)
MEPS	--	--	--	--
	(--)	(\$58,800,000)	(--)	(+500,000)
Research Management	--	--	--	--
(Patient-Centered Health Research)	(--)	(\$67,600,000)	(+15)	(+2,250,000)
Subtotal, Program			--	--
			(+15)	(+258,377,000)
Total Increases			--	--
			(+15)	(+261,240,000)

Summary of Changes Continued

	<u>2010 Current</u>		<u>Change from Base</u>	
	<u>Budget Base</u>		<u>Budget</u>	
	<u>(FTE)</u>	<u>Authority</u>	<u>(FTE)</u>	<u>Authority</u>
<u>Decreases</u>				
A. <u>Built-in:</u>				
1. Crosscut Activities	--	--	-	--
	(--)	(111,789,000)	(--)	(-2,863,000)
Subtotal, Built-in			(--)	(-2,863,000)
B. <u>Program:</u>				
HCQO				
1. General Patient Safety	--	--	--	--
	(--)	(\$90,585,000)	(--)	(-25,963,000)
2. Crosscutting Activities	--	--	--	--
	(--)	(\$111,789,000)	(--)	(-18,555,000)
Subtotal, Program			(--)	(-44,518,000)
Total Decreases			(--)	(-47,381,000)
Net change, Budget Authority			--	--
Net change, Obligations			(+15)	(+213,859,000)

Budget Authority by Activity

DEPARTMENT OF HEALTH AND HUMAN SERVICES AGENCY FOR HEALTHCARE RESEARCH AND QUALITY

Budget Authority by Activity 1/
(Dollars in thousands)

	FY 2009 Actual		FY 2010 Estimate		FY 2011 PB	
	FTE	Amount	FTE	Amount	FTE	Amount
1. Research on Health Costs, Quality, & Outcomes BA.....	---	0		0	---	0
PHS Evaluation.....	[0]	[251,631]	[0]	[270,653]	[0]	[478,899]
Total Operational Level.....	0	251,631	0	270,653	0	478,899
2. Medical Expenditures Panel Surveys BA.....	---	---	---	---	---	---
PHS Evaluation.....	---	[55,300]	---	[58,800]	---	[59,300]
Total Operational Level.....	---	55,300	---	58,800	---	59,300
3. Program Support BA.....	---	---	---	---	---	---
PHS Evaluation.....	[289]	[65,122]	[300]	[67,600]	[315]	[72,713]
Total Operational Level.....	289	65,122	300	67,600	315	72,713
Total, Budget Authority.....	0	0	0	0	0	0
Total PHS Evaluation.....	[289]	[372,053]	[300]	[397,053]	[315]	[610,912]
Total Operations	289	372,053	300	397,053	315	610,912

1/ Excludes funding from other HHS operating divisions provided through reimbursable agreements.

Authorizing Legislation 1/

	2010 Amount Authorized	2010 Appropriations Act	2011 Amount Authorized	FY 2011 President's Budget
<u>Research on Health Costs,</u>				
<u>Quality, and Outcomes:</u>				
Secs. 301 & 926(a) PHSA.....	SSAN	\$0	SSAN	\$0
<u>Research on Health Costs,</u>				
<u>Quality, and Outcomes:</u>				
Part A of Title XI of the Social Security Act (SSA) Section 1142(i) 2/ 3/ Budget Authority.....				
Medicare Trust Funds 4/ 3/ Subtotal BA & MTF.....				
	Expired 5/		Expired 5/	
<u>Program Support:</u>				
Section 301 PHSA.....	Indefinite	\$0	Indefinite	\$0
<u>Evaluation Funds:</u>				
Section 937 (c) PHSA	<u>Indefinite</u>	<u>\$397,053</u>	<u>Indefinite</u>	<u>\$610,912</u>
Total appropriations.....		\$397,053		\$610,912
Total appropriation against definite authorizations.....	---	---	----	----

SSAN = Such Sums As Necessary

- 1/ Section 487(d) (3) PHSA makes one percent of the funds appropriated to NIH for National Research Service Awards available to AHRQ. Because these reimbursable funds are not included in AHRQ's appropriation language, they have been excluded from this table.
- 2/ Pursuant to Section 1142 of the Social Security Act, FY 1997 funds for the medical treatment effectiveness activity are to be appropriated against the total authorization level in the following manner: 70% of the funds are to be appropriated from Medicare Trust Funds (MTF); 30% of the funds are to be appropriated from general budget authority.
- 3/ No specific amounts are authorized for years following FY 1994.
- 4/ Funds appropriated against Title XI of the Social Security Act authorization are from the Federal Hospital Insurance Trust Funds (60%) and the Federal Supplementary Medical Insurance Trust Funds (40%).
- 5/ Expired September 30, 2005.

Appropriations History

Appropriation History Table Agency for Healthcare Research and Quality

	Budget Estimates to Congress	House Allowance	Senate Allowance	Appropriation
2002				
Budget Authority.....	\$ -	\$ 168,445,000	\$ 291,245,000	\$ 2,600,000
PHS Evaluation Funds.....	\$ 306,245,000	\$ 137,800,000	\$ -	\$ 296,145,000
Total.....	\$ 306,245,000	\$ 306,245,000	\$ 291,245,000	\$ 298,745,000
2003				
Budget Authority.....	\$ -	\$ -	\$ 202,645,000	\$ -
PHS Evaluation Funds.....	\$ 250,000,000	\$ -	\$ 106,000,000	\$ 303,695,000
Bioterrorism.....	\$ -	\$ -	\$ 5,000,000	\$ 5,000,000
Total.....	\$ 250,000,000	\$ -	\$ 313,645,000	\$ 308,695,000
2004				
Budget Authority.....	\$ -	\$ -	\$ -	\$ -
PHS Evaluation Funds.....	\$ 279,000,000	\$ 303,695,000	\$ 303,695,000	\$ 318,695,000
Total.....	\$ 279,000,000	\$ 303,695,000	\$ 303,695,000	\$ 318,695,000
2005				
Budget Authority.....	\$ -	\$ -	\$ -	\$ -
PHS Evaluation Funds.....	\$ 303,695,000	\$ 303,695,000	\$ 318,695,000	\$ 318,695,000
Total.....	\$ 303,695,000	\$ 303,695,000	\$ 318,695,000	\$ 318,695,000
2006				
Budget Authority.....	\$ -	\$ 318,695,000	\$ -	\$ -
PHS Evaluation Funds.....	\$ 318,695,000	\$ -	\$ 323,695,000	\$ 318,692,000
Total.....	\$ 318,695,000	\$ 318,695,000	\$ 323,695,000	\$ 318,692,000
2007				
Budget Authority.....	\$ -	\$ 318,692,000	\$ 318,692,000	\$ -
PHS Evaluation Funds.....	\$ 318,692,000	\$ -	\$ -	\$ 318,983,000
Total.....	\$ 318,692,000	\$ 318,692,000	\$ 318,692,000	\$ 318,983,000
2008				
Budget Authority.....	\$ -	\$ 329,564,000	\$ 329,564,000	\$ -
PHS Evaluation Funds.....	\$ 329,564,000	\$ -	\$ -	\$ 334,564,000
Total.....	\$ 329,564,000	\$ 329,564,000	\$ 329,564,000	\$ 334,564,000
2009				
Budget Authority.....	\$ -	\$ 323,087,000	\$ 90,598,000	\$ -
PHS Evaluation Funds.....	\$ 325,664,000	\$ 51,913,000	\$ 243,966,000	\$ 372,053,000
ARRA Funding P.L. 111-5.....	\$ -	\$ -	\$ -	\$ 1,100,000,000 1/
Total.....	\$ 325,664,000	\$ 375,000,000	\$ 334,564,000	\$ 1,472,053,000
2010				
Budget Authority.....	\$ -	\$ -	\$ -	\$ -
PHS Evaluation Funds.....	\$ 372,053,000	\$ 372,053,000	\$ 372,053,000	\$ 397,053,000
Total.....	\$ 372,053,000	\$ 372,053,000	\$ 372,053,000	\$ 397,053,000
2011				
Budget Authority.....	\$ -			
PHS Evaluation Funds.....	\$ 610,912,000			
Total.....	\$ 610,912,000			

1/ In FY 2009, the American Recovery and Reinvestment Act (ARRA) provided \$1,100,000,000 for research that compares the effectiveness of medical options. Of this total, \$400,000,000 was transferred to the National Institute of Health and a total of \$400,000,000 will be allocated at the discretion of the Secretary of the Department of Health and Human Services. A new Federal Coordinating Council helped set the agenda for these funds. The remaining \$300,000,000 was available for the AHRQ. These funds are available for obligation in FY 2009 and FY 2010. Of the 38 FTEs allocated for the ARRA funds, AHRQ is allocated 15 FTEs and the Office of the Secretary supports 22 FTEs with their ARRA funds.

Appropriations Not Authorized by Law

Program	Last Year of Authorization	Authorization Level in Last Year of Authorization	Appropriations in Last Year of Authorization	Appropriations in FY 2010
Research on Health Costs, Quality, and Outcomes.....	FY 2005	Such Sums As Necessary	260,695,000	397,053,000

Research on Health Costs, Quality, and Outcomes (HCQO)

	FY 2009 Enacted	FY 2009 Recovery Act	FY 2010 Appropriation Level	FY 2011 President's Budget	FY 2011 +/- FY 2010
TOTAL					
--BA	\$ -	\$ 700,000,000	\$ -		
--PHS Eval	\$ 251,631,000	\$ -	\$ 270,653,000	\$478,899,000	\$ 208,246,000

Authorizing Legislation: Title III and IX and Section 937(c) of the Public Health Service Act and Section 1013 of the Medicare Prescription Drug, Improvement, and Modernization Act (MMA) of 2003.

FY 2009 Authorization.....Expired
Allocation Method.....Competitive Grant/Cooperative Agreement, Contracts, and Other.

Summary

AHRQ requests \$478,899,000 for Research on Health Costs, Quality, and Outcomes (HCQO) at the FY 2011 Request level, an increase of 208,246,000 over the FY 2010 Appropriation level. All funds are provided using PHS Act Evaluation Funds.

Research Priorities

Within the HCQO budget activity, AHRQ supports research related to six research priorities. A summary of each research priority is provided below. Additional details related to these priorities can be found beginning on page 23.

- **Patient-Centered Health Research:** The FY 2011 Request level provides \$286,274,000 for Patient-Centered Health Research (\$272,750,000 in HCQO and \$13,524,000 in Program Support), an increase of \$261,218,000 overall (+\$251,750,000 over the FY 2010 Appropriation level for HCQO and an increase of +\$9,468,000 within Program Support). Patient-centered health research improves health care quality by providing patients and physicians with state-of-the-science information on which medical treatments work best for a given condition. The FY 2011 Request provides an additional \$2,250,000 in Program Support for salaries and benefits associated with an additional 15 FTEs needed to help implement this program.
- **Prevention and Care Management:** The FY 2011 Request level for Prevention and Care Management is \$15,904,000, the same level of support as the FY 2010 Appropriation level. The purpose of AHRQ's Prevention/Care Management portfolio is to improve the quality, safety, efficiency, and effectiveness of the delivery of evidence-based preventive services and chronic care management in ambulatory care settings. This portfolio seeks to accomplish the mission by: 1. Supporting clinical decision-making for preventive services through the generation of new knowledge, the synthesis of evidence, and the dissemination and implementation of evidence-based recommendations; and, 2. Supporting the evidence base for and implementation of activities to improve primary care and clinical outcomes through: health care redesign; clinical-community linkages; self management support; integration of health information technology; and care coordination.

- Value Research: The FY 2011 Request level includes \$3,730,000 for Value Research, maintaining the FY 2010 Appropriation level. Value research focuses on finding a way to achieve greater value in health care – reducing unnecessary costs and waste while maintaining or improving quality. AHRQ’s Value portfolio aims to meet this need by producing the measures, data, tools, evidence, and strategies that health care organizations, systems, insurers, purchasers, and policymakers need to improve the value and affordability of health care. The aim is to create a high-value system, in which providers produce greater value, consumers and payers choose value, and the payment system rewards value.
- Health Information Technology (Health IT): The FY 2011 Request level for Health IT research is \$31,522,000, an increase of \$3,877,000 over the FY 2010 Appropriation level. AHRQ’s research on health IT is a key element to bring health care into the 21st century by advancing the use of information technology. Established in 2004, the purpose of the Health IT portfolio at AHRQ is to develop and disseminate evidence and evidence-based information tools to inform policy and practice on how health IT can improve the quality of American health care. Through grants and contracts, AHRQ and its partners work to improve the quality of health care by identifying challenges to health IT adoption and use, solutions, and best practices for making health IT work, and developing tools that will help hospitals and clinicians successfully incorporate new IT.
- Patient Safety Research: The FY 2011 Request level includes \$64,622,000 for Patient Safety research, a decrease of \$25,963,000 from the FY 2010 Appropriation level. The majority of the decrease is related to the end of a \$25,000,000 Medical Malpractice research program. The research grant program was funded using multi-year authority and no additional funds are required in FY 2011. The FY 2011 Request provides \$57,622,000 for research related to patient safety threats and medical errors, of which \$34,000,000 is for research on health care-associated infections. An additional \$7,000,000 will continue to support research related to the Patient Safety and Quality Improvement Act of 2005 and patient safety organizations (PSOs).

AHRQ’s patient safety research priority 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. AHRQ supports research that provides information on the scope and impact of medical errors, identifies the root causes of threats to patient safety, and examines effective ways to make system-level changes to help prevent errors. Dissemination and translation of these research findings and methods to reduce errors is also critical to improving the safety and quality of health care. To make changes at the system level, there also must be an environment, or culture, within health care settings that encourages health professionals to share information about medical errors and ways to prevent them.

- Crosscutting Activities Related to Quality, Effectiveness, and Efficiency Research: The FY 2011 Request level provides \$90,371,000 for Crosscutting Activities Related to Quality, Effectiveness and Efficiency research, a decrease of \$21,418,000 from the FY 2010 Appropriation level. Crosscutting Activities includes a variety of research projects that support all of our research portfolios. These activities include investigator-initiated research, data collection, measurement, dissemination and translation, program evaluation, grant review support, and other crosscutting contracts.

5-Year Table Reflecting Dollars

Funding for the HCQO program during the last five years has been as follows below. These levels have been made comparable to reflect the centralization of all staff and administrative overhead costs out of Crosscutting Activities and into Program Support. In addition, please note that all FTEs have been now moved to Program Support. (Please see page 108 for a breakout of Program Support costs by portfolio.)

<u>Year</u>	<u>Dollars</u>
2006	\$203,755,000
2007	\$201,444,000
2008	\$214,184,000
2009	\$251,631,000
2010	\$270,653,000

Patient-Centered Health Research

	FY 2009 Enacted	FY 2009 Recovery Act	FY 2010 Appropriation Level	FY 2011 President's Budget	FY 2011 +/- FY 2010
TOTAL					
--BA	\$ -	\$ 700,000,000	\$ -		\$ -
--PHS Eval	\$ 50,000,000	\$ -	\$ 21,000,000	\$272,750,000	\$ 251,750,000

Note: In addition, the following amounts are included within Program Support for Patient-Centered Health Research: \$10,420,000 in FY 2009, \$4,056,000 in FY 2010, and \$13,524,000 in FY 2011. In addition, \$300,000,000 was provided in FYs 2009 and 2010 through the Recovery Act.

Authorizing Legislation: Title III and IX and Section 937(c) of the Public Health Service Act and Section 1013 of the Medicare Prescription Drug, Improvement, and Modernization Act (MMA) of 2003.

FY 2009 Authorization.....Expired
Allocation Method.....Competitive Grant/Cooperative Agreement, Contracts, and Other.

A. Program Description and Accomplishments

The Effective Health Care Program, launched in September 2005, supports the development of new scientific information through patient-centered health research on the outcomes of health care services and therapies, including drugs. By reviewing and synthesizing published and unpublished scientific studies, as well as identifying important issues where existing evidence is insufficient and undertaking new research, the program helps provide providers, clinicians, policymakers, and consumers with better information for making informed health care treatment decisions. In this program, AHRQ seeks an emphasis on timely and usable findings, building on the thoroughness and unbiased reliability that have been hallmarks of efforts so far. Equally important is broad ongoing consultation with stakeholders, which helps ensure that the program responds to issues most pressing for health care decisionmakers. Collaboration is also a key principle of the program and AHRQ works closely with many agencies of the Department of Health and Human Services (HHS) to identify topics for research under the program and to communicate findings, including identified research gaps.

One measure the Effective Health Care Program uses to evaluate its success is the amount of evidence made available to the public. In FY 2006, the program released four systematic reviews and one summary guide. In FY 2007, the program released four systematic reviews and eight summary guides. Four new research reports, including a user's guide to registries evaluating patient outcomes and a Medical Care journal supplement on emerging methods in comparative effectiveness and safety, were also released. In FY 2008, the program released 7 systematic reviews and 12 summary guides including 2 guides that were translated into Spanish. In FY 2009, the program released 6 systematic reviews, 16 new research and 13 summary guides with audio files and translated into Spanish. This information is reported in key output #4.4.5 in section D, Outputs and Outcomes Tables. Because the FY 2010 non-Recovery Act appropriation did not include funding for systematic reviews or their translation, the related output in FY 2010 and FY 2011 is expected to be greatly diminished. However, in FY 2010 \$25 million in Recovery Act funds will support

increased production of systematic reviews which are reflected in Recovery Act performance measure AHRQ ARRA 1 on page 7.

The Effective Health Care Program produces a variety of information products to help patients and their families understand the effectiveness and risks of different treatment options while allowing for choices based on the circumstances of the individual patients. Key output measures #4.4.5 and #1.3.25 focus on the production and dissemination of the information products, systematic reviews and summary guides. The program also produces new research reports, clinical research studies that draw on health care databases, electronic patient registries, and other scientific approaches to explore practical questions about the effectiveness, safety and appropriateness of treatments. AHRQ is working to further develop key output measures #4.4.5 and #1.3.25 in order to capture data on the production and dissemination of all information products produced by the Effective Health Care Program that could help us meet our long-term objective to improve patients' quality of care and health outcomes through informed decisionmaking by patients, providers, and policymakers.

All reports produced by the program are available on the Effective Health Care Web site, <http://www.EffectiveHealthCare.ahrq.gov>. In FY 2009, the Web site was significantly enhanced to improve usability. The Web site also includes features for the public to participate in the Effective Health Care Program. Users can sign up to receive notification when new reports are available. They can also be notified when draft key questions for research, draft reports, and other features are posted for comment, and comments can be submitted through the Web site. The public is also invited to use the Web site to nominate topics for research by the Effective Health Care Program. The priority conditions which guide the work of the program are targeted to Medicaid, Medicare, and SCHIP (State Children's Health Insurance Program) beneficiaries (see text box).

There is growing interest in, and attention to, enhancing the role of the Effective Health Care Program's research in our health care system. For example:

- | Effective Health Care
Priority Conditions |
|--|
| <ul style="list-style-type: none">• Arthritis and non-traumatic joint disorders• Cancer• Cardiovascular disease, including stroke and hypertension• Dementia, including Alzheimer Disease• Depression and other mental health disorders• Developmental delays, attention-deficit hyperactivity disorder, and autism• Diabetes Mellitus• Functional limitations and disability• Infectious diseases including HIV/AIDS• Obesity• Peptic ulcer disease and dyspepsia• Pregnancy including pre-term birth• Pulmonary disease/Asthma• Substance abuse |

- Consumer Reports Best Buy Drugs, a public education product of Consumers Union, uses findings from the program to help clinicians and patients determine which drugs and other medical treatments work best for certain health conditions. Over the course of the project, more than 1 million reports have been downloaded. In addition to the consumer materials and reports being disseminated via the Web site, they are disseminated by a Best Buy Drugs outreach program that links to existing groups with statewide reach and credibility throughout the medical community.
- The National Business Group on Health also uses findings from the Effective Health Care Program in their Evidence-based Benefit Design initiative to provide employers

and their employees' best available evidence for designing benefits and making treatment choices.

- Omnicare, Inc., a leading provider of pharmaceutical care for the elderly, uses Effective Health Care Program summary guides as a tool for its consultant pharmacists and facilities, which are primarily nursing homes. Omnicare serves approximately 1.4 million residents in more than 15,000 long-term care facilities in 47 States, Washington, DC, and Canada.
- Su Clinica Familiar, a multi-office health clinic in south Texas, uses AHRQ's Effective Health Care Program summary guides for clinicians and patients to better address concerns of patients and as teaching resources for patients.
- Medscape and the American Academy of Family Physicians offers continuing medical education (CME) based on research reviews, and numerous other organizations use the findings in their deliberations on patient care, formulary design, and areas for needed research.
- AHRQ executed an agreement with AARP in 2009 that provides for the co-branding of Effective Health Care consumer summary guides on five different topics – treatments for depression, gastroesophageal reflux disease (GERD), osteoarthritis, hypertension, and osteoporosis. AARP has agreed to offer the publications on the "Know Your Rx Options" page of the AARP Web site and on its printed publications order form that is distributed via AARP state offices. The co-branded guides would also be promoted through AARP's employer outreach program. Further promotion may occur through AARP's nationwide "bus tour" co-sponsored by Walgreen's.
- The Society for Academic Continuing Medical Education (SACME) devoted a session of its 2009 annual meeting to comparative effectiveness and Effective Health Care. The session was promoted in SACME's newsletter, INTERCOM. SACME's meeting prompted medical school CME directors, deans, professors and others to order 11,036 copies of clinician guides on insulin analogs and treatments for osteoarthritis of the knee. Among those placing orders were Duke, University of Pennsylvania, University of Virginia, Dartmouth and University of California, San Francisco. The organization subsequently coordinated with AHRQ to distribute Effective Health Care summary guides and promotional materials to its 300 members through a direct mailing effort in 2009.
- In 2009, the Johns Hopkins Office of Continuing Medical Education sent e-mails highlighting the Effective Health Care Program to more than 100,000 physicians, nurses, physician assistants, and others who have participated in Hopkins' CME activities. The e-mails, also sent to Hopkins faculty, included promotional information and links to announcements that encourage clinicians to access Effective Health Care summary guides on osteoarthritis and Type 2 diabetes medications. Hopkins has added the Effective Health Care Program link to its resource page.
- The American Osteopathic Association (AOA) placed half-page ads in their April and May 2009 editions of their professional journal. The May ad encourages clinicians to order up to 200 free copies of summary guides. The circulation of the *Journal of the American Osteopathic Association* is about 65,000. The AOA has also promoted Effective Health Care Program materials through several other channels, including the AOA Executive Director's daily blog and the AOA web site.
- Winn-Dixie, a grocery chain based in Florida, has agreed to distribute several CE consumer brochures as part of its grassroots community wellness initiative to underserved populations. The brochures on pain medicine for osteoarthritis, antidepressants, and pills for type 2 diabetes also may be part of an in-store giveaway at Winn-Dixie in 2010.

- The New Mexico Medical Society has agreed to place an Effective Health Care program newsletter announcement, an ad in an upcoming membership publication, and a link on its Web site to announce the availability of clinician summary guides. The society encouraged its 3,000 members, who represent 85 percent of the practicing physicians in the State, to order the guides. In addition, the National Hispanic Medical Association, which represents 36,000 Hispanic physicians in the United States, has alerted its members via e-mail in 2009 that the Effective Health Care program now has Spanish-language consumer guides available on nine topics.

These examples of organizations disseminating evidence from the Effective Health Care Program to their constituents are directly linked to key output (#1.3.25) listed in section D, Output and Outcomes Tables.

Key output #1.3.26 in section D, Outputs and Outcomes Tables, increases the amount of evidence from the PCHR portfolio that policymakers use as a foundation for population-based policies and helps guide our relationship with the AHRQ-sponsored Medicaid Medical Director’s Learning Network. Twenty three State Medicaid Medical Directors report that they use Effective Health Care Program resources in a variety of ways. For example, they are incorporated into clinical guidelines created and disseminated by the States, incorporated into health plan educations materials, and used to inform coverage decisions and to set criteria for prior authorization.

As written, key output #1.3.26 focuses on one stakeholder group of importance to the Effective Health Care Program. Since AHRQ’s long-term objective is to improve decisionmaking by patients, providers, and policymakers, we are working to further develop and expand this measure so that we can capture data on how other important stakeholder groups, specifically clinicians, are using the program’s materials to help inform decisions.

Developmental measure #1.3.24 is to decrease mortality from and increase receipt of recommended care for subset of diseases measured and reported on in the National Health Care Quality Report (NHQR). In the process of developing this measure, AHRQ had been working to identify measures from the NHQR and limit them to a ~3 based on priority conditions to track over time. AHRQ is in the process of determining whether these measures will accurately capture the work and impact of the Effective Health Care Program. In addition, AHRQ is exploring whether the data as currently exists will not provide robust data on which to chart this measure. During the FY 2010 and FY 2011 the program will explore the development of an alternate measure to more accurately measure the program’s impact on improving patients’ quality of care and health outcomes through informed decision making.

B. Funding History

Funding for the Patient-Centered Health Research program during the last five years has been as follows:

<u>Year</u>	<u>Dollars</u>
2006	\$ 15,000,000
2007	\$ 15,000,000
2008	\$ 30,000,000
2009	\$ 50,000,000
2010	\$ 21,000,000

C. Budget Request

The FY 2011 Request level provides \$286,274,000 for Patient-Centered Health Research (\$272,750,000 in HCQO and \$13,524,000 in Program Support), an increase of \$261,218,000 overall (+\$251,750,000 over the FY 2010 Appropriation level for HCQO and an increase of +\$9,468,000 within Program Support). The table below details AHRQ's funding for FY 2011 Patient-Centered Health Research. Further details are provided in the narrative section following the table.

Patient-Centered Health Research (dollars in millions)

Research	Type of Financial Award	FY 2009 Enacted (\$50 M)	FY 2009 /2010 Recovery Act (\$300 M)	FY 2010 Appropriation (\$21 M)	FY 2011 Request (\$272.75 M)
I. Identification of New and Emerging Issues for Patient-Centered Health Research (Horizon Scanning)	Contracts	\$1.000	\$9.500	\$0.000	\$9.500
II. Evidence Synthesis	Contracts	12.800	25.000	0.000	25.000
III. Evidence Gap Identification	Contracts	1.000	25.000	0.000	25.000
IV. Evidence Generation	Grants	10.000	149.000	10.000	86.250
	Contracts	15.100	24.000	8.500	50.000
V. Translation and Dissemination	Grants	1.000	29.500	1.000	20.000
	Contracts	6.500	5.000	0.000	35.000
VI. Training and Career Development	Grants	1.600	20.000	1.500	10.000
VII. Citizen Forum (Stakeholder Engagement)	Contracts -	1.000	10.000	0.000	12.000
Salaries and Benefits for Temp. ARRA FTEs	Salary and Benefits	0.000	3.000	0.000	0.000
TOTAL		\$50.000	\$300.000	\$21.000	\$272.750

Research and Training Grants:

The FY 2011 Request provides \$116,250,000 for research and training grants, an increase of \$103,750,000 from the FY 2010 Appropriation. The increases are discussed in detail, by research component, on the following page.

Research Contracts and IAAs:

Research contracts and IAAs are supported at \$156,500,000 in the FY 2011 Request, an increase of \$148,000,000 over the FY 2010 level. The increases are discussed in detail, by research component, below.

I. Identification of New and Emerging Issues for Patient-Centered Health Research (Horizon Scanning) - \$9.50 million

Horizon scanning is the identification of current or emerging medical interventions available to diagnose, treat, or otherwise manage a particular condition. Horizon scanning activities are vital for understanding the relevant healthcare context and landscape, as a basis for identifying and beginning to prioritize among research needs.

In FY 2008 and FY 2009, the Effective Health Care Program's effort employed technical briefs, rapid reports that examine new technologies (e.g. drugs, devices, procedures, diagnostic tests), evaluate the extent of their current use, and assess the amount of evidence supporting these technologies.

Five technical briefs have been initiated since FY 2008: Particle Beam Radiation Therapies for Cancer, Stereotactic Radiosurgery for Extracranial Solid Tumors, Comparative Effectiveness of Chemotherapy Agents in the Prevention of Primary Breast Cancer in Women, Percutaneous Heart Valves, and Fetal Surgery.

AHRQ will use FY 2009/2010 Recovery Act funding to establish an infrastructure to identify new and/or emerging issues for research review investments. This program will be dedicated to tracking emerging technologies and investigating their contextual role in health care.

It will establish and use an efficient approach to investigate and prioritize areas for investigation relevant to the 14 priority conditions that guide AHRQ's Effective Health Care Program and that can be scaled for a national investment in research that compares the effectiveness of different health care interventions. This new activity will track emerging clinical interventions and investigate key issues related to the intervention.

The FY 2011 Request will support the infrastructure to identify new and/or emerging issues for research reviews investments established with Recovery Act funding and will continue to employ technical briefs. These reports will provide a public framework of pertinent issues and identify significant or controversial questions of effectiveness that may be addressed by undertaking new evidence synthesis or generation and will be presented in formats conducive to priority setting activities.

II. Evidence Synthesis - \$25.00 million

Evidence syntheses include the review and synthesis of current medical research to provide rigorous evaluation of what is known on the basis of existing research about the effectiveness of alternative approaches to given clinical problems.

In FY 2008 and FY 2009, AHRQ's Evidence-based Practice Centers (EPC) produced 7 and 10 and research reviews, respectively.

AHRQ will use FY 2009/2010 Recovery Act funding to increase support for research reviews. Approximately 10 to 30 research reviews are expected to be funded with ARRA funds, depending on the research to be pursued. AHRQ will also strategically build upon the existing strengths of the EPCs to include a focus on capacity-building to create a larger and stronger pool of expertise in systematic review and to advance the scientific methods of systematic review. Recovery Act funding will also allow for continued and enhanced investments in research methods for conducting systematic reviews to answer research questions about the effectiveness of different health care interventions.

The FY 2011 Request will continue to support the development of research reviews. The goal of this effort will be to increase the information base of research synthesis available to support decisions in the clinical and other health care decision settings. The research reviews will contribute to the identification of patient-centered health research needs and knowledge gaps. This activity is directly linked to key output #4.4.5: Increase # of systematic reviews and summary guides produced per year. Research reviews take, on average, 12-15 months to produce so those reviews initiated in FY 2011 will be made available to the public in FY 2012 and included in the FY 2012 Outputs and Outcomes Tables. Additionally, targets for FY 2010 (23 total products) and FY 2011 (10 total products) are lower than the FY 2009 Actual (35 total products) because the FY 2010 appropriation does not include funding for systematic reviews or their translation. However, in FY 2010 \$25 million in Recovery Act funds will support increased production of systematic reviews which are reflected in Recovery Act performance measure AHRQ ARRA 1 on page 7.

This funding will also support an ongoing strategic enhancement of the EPC Program that will include a focus on capacity-building and advancing the scientific methods of systematic review.

III. Evidence Gap Identification - \$25.00 million

Evidence gap identification is the identification of areas where new research conducted would contribute to bridging the gap between existing medical research and clinical practice.

In FY 2008 and 2009, EPCs were charged with identifying evidence gaps in their systematic reviews of the literature. FY 2009/2010 Recovery Act funding will allow AHRQ to put greater emphasis on the identification of evidence needs in the systematic review process, which begins with the identification of evidence gaps that has been the purview of the EPCs. This effort will be designed to produce recommendations that further consider the timing, value and feasibility of research that would fill these gaps and will include coordination with other funders as well researchers able to conduct needed research.

With FY 2009/2010 With Recovery Act funds, AHRQ will initiate an enhanced capacity for identifying and prioritizing evidence needs. A process will be developed that will involve stakeholders, including clinicians, funding agencies, and researchers, to consider the gaps identified in systematic reviews. This will help shape future research agendas and set priorities for a national investment in new research based on the findings.

This process will involve bringing together the researchers that worked on the individual review, as well as stakeholders with interest in the topic, clinicians with expertise in the topic area, agencies with funds for potential future research, and researchers with expertise in the clinical area and study design to identify evidence needs and to develop new research based on the findings of the research review. Funding will be used to develop this formal approach to ensure it is transparent, systematic, strategic, and rigorous. This activity will build on and expand current AHRQ Effective Health Care Program efforts to involve stakeholders in the research.

The FY 2011 Request will support the formal process for identifying evidence gaps developed with ARRA funds. The process will continue to involve stakeholders, including clinicians, funding agencies and researchers to identify evidence needs and set priorities for a national investment in new research based on the findings of individual research reviews. This funding will allow AHRQ to continue to systematically expand the use of research reviews in the identification and prioritization of research needs.

Funding will be also used to invest in the further development of this approach to assure that it is systematic, transparent, strategic, and methodologically rigorous. In 2011, this effort will begin to produce recommendations that consider the timing, cost, and feasibility of research that would address key questions, in addition to the predicted value of the information generated.

IV. Evidence Generation - \$136.25 million

Evidence generation is the conduct of new research that compares the effectiveness of different health care interventions. It is essential to meeting the needs of clinical and health policy decision makers.

In FY 2008 and FY 2009, AHRQ supported the DEClIDE (Developing Evidence to Inform Decisions about Effectiveness) Network. This research network conducts practical studies about the outcomes, comparative clinical effectiveness, safety, and appropriateness of health care items and services. The network is comprised of research-based health organizations with access to electronic health information databases and the capacity to conduct research. In FY 2009, the DEClIDE Research Network produced 16 Effective Health Care research reports and a series of methodological tools for researchers. All products are available on the Effective Health Care Web site. In FY 2010, AHRQ will continue to support a DEClIDE Network and will re-compete the DEClIDE contract.

FY 2009/2010 Recovery Act funding will include both efforts to build the infrastructure for conducting studies that compare the effectiveness of different health care interventions, and underwriting rigorous research with dedicated study designs and data collection to definitively address knowledge gaps that could not otherwise be addressed.

Evidence generation is the largest investment in AHRQ's Recovery Act funds and is intended to establish a coordinated national investment in practical/pragmatic patient-centered health research. It will focus on important research questions for the health care system and its users, with a concentration in under-represented populations. There are four key areas for investment: Clinical and Health Outcomes Initiative in Comparative Effectiveness (CHOICE) studies, Request for Registries, DEClIDE Consortium Support, and Unfunded Meritorious Applications. CHOICE will represent the first coordinated national effort to establish a series of pragmatic clinical patient-centered health research

studies in the United States. These pragmatic studies will measure effectiveness – the benefit the treatment produces in routine clinical practice – and will include novel study designs focusing on real-world populations. Disease registries are databases that collect clinical data on patients with a specific disease or keep track of specific medical tests, devices, or surgical procedures (joint replacements, heart valve replacements, etc.). The Request for Registries will establish or enhance national patient registries that can be used for researching the longitudinal effects of different interventions and collect data on under-represented populations. Finally, the DEcIDE Consortium will expand the DEcIDE Network to expand multi-center research consortia, comprised of academic, clinic, and practice-based centers, to study diabetes, cancer, cardiovascular disease, and other priority conditions, and by funding distributed data network models utilizing clinically rich data from electronic health records. Consortium were developed in diabetes, cancer, and cardiovascular disease because they are among the priority conditions established by the Secretary, they are three leading causes of the burden of disease in the United States, and they represent areas with potential impact for reducing clinically significant variations in the prevention, diagnosis, treatment, or management of a disease or condition, or in the use of a procedure or technology.

FY 2011 funding will support large research projects in patient-centered health research aimed at generating new knowledge to help inform decision making in priority areas of clinical care. The impact of these studies should have a high likelihood of creating major advancements in clinical care. Emphasis will be placed on projects that define important research gaps, plan to provide actionable results, and employ novel or alternative study designs as appropriate. AHRQ will also fund projects that will effect a substantial improvement in the Nation's capacity to systematically collect prospective data to perform patient-centered health research that compares the effectiveness of diagnostics, therapeutics (drugs and biologics), devices, behavioral interventions, and procedures used in clinical care.

Clinical research projects will be informed by the information needs and inputs from various stakeholders (e.g., policy-makers, clinicians, and patients) to ensure the most appropriate outcome measures for assessing the effectiveness of the interventions and outcomes of importance to stakeholders are included in the study.

The FY 2011 Request will also used to fund the out-years of grants awarded in prior years with annually appropriated dollars. In addition, AHRQ will use \$6 million in new grants to support at least six Centers for Education & Research on Therapeutics (CERTs) whose work will focus on patient-centered health research.

V. Translation and Dissemination - \$55.0 million

Dissemination and translation efforts ensure that knowledge synthesized or generated within the patient-centered health research program is available to decision makers to better inform their decisions.

In FY 2008 and FY 2009, the John M. Eisenberg Clinical Decisions and Communications Science Center translated complex scientific research produced in the Effective Healthcare Program into short, clear and actionable materials and products that can be used by three primary audiences: consumers, clinicians, and policy makers. The Eisenberg Center produced 8 summary guides in FY 2008 and 6 summary guides in FY 2009 and translations into Spanish and audio files for patients.

With FY 2009/2010 Recovery Act funding, AHRQ will increase efforts in this area, expanding the number of clinician- and consumer-oriented summaries of findings produced by the Eisenberg Center (currently operated by Baylor College of Medicine). As the translation and dissemination component of the patient-centered health research initiative, the Eisenberg Center will continue to produce these products in partnership with specific stakeholder groups, including the general public, patients, providers, payers, and policy-makers, to generate information tailored to their circumstances. Recovery Act funds will also enable new investments in innovative research on incorporating patient-centered health research into decision making, such as integrating clinical decision support tools into health information technologies. Approximately 15 to 45 tools including summary guides for consumers, clinicians and policymakers are expected to be funded with Recovery Act funds, depending on the number of research reviews produced and the scope of those reports.

The Recovery Act funds will primarily be used to support grantees in developing and implementing innovative approaches to integrating patient-centered health research findings into clinical practice and health care decision making. Investments will be in multiple geographically dispersed translation, implementation, and evaluation projects to be carried out by local organizations such as medical societies, state institutions of higher learning, patients, community advocacy organizations and others to promote education, dissemination and application of patient-centered health research.

The FY 2011 Request will support AHRQ's translation and dissemination activities expanded with Recovery Act funding and will continue to strengthen the infrastructure supporting these activities. These funds will be used to continue to support grantees in developing and implementing innovative approaches to integrating patient-centered health research findings into clinical practice and health care decision making. Funding will also support the John M. Eisenberg Clinical Decisions and Communications Science Center. This activity is directly linked to key output #4.4.5: Increase # of systematic reviews and summary guides produced per year. Summary guides are developed based on research reviews. Research reviews and subsequently summary guides take, on average, 12-15 months to produce so reviews and summary guides initiated in FY 2011 will be made available to the public in FY 2012 and included in the FY 2012 Outputs and Outcomes Tables. Additionally, targets for FY 2010 (6 SG) and FY 2011 (2 SG) are low because the FY 2010 appropriation does not include funding for systematic reviews or their translation. However, in FY 2010 \$5 million in Recovery Act funds will support increased production of systematic summary guides which are reflected in Recovery Act performance measure AHRQ ARRA 1 on page 7.

VI. Training and Career Development - \$10.00 million

Research training and career development of researchers and clinicians will strengthen the research infrastructure and build capacity through ensuring a sufficient pool of research expertise for national efforts in research that compares the effectiveness of different health care interventions.

In FY 2008 and FY 2009, AHRQ invested in patient-centered health research career development awards. These awards were intended to build capacity for, and to support the career development of clinical and research doctorates focusing their research on, patient-centered health research through commitment and investment in training and mentorship.

AHRQ will use 2009/2010 Recovery Act funding for patient-centered health research capacity building. AHRQ will provide institutional support to increase the intellectual and organizational capacity for larger scale research programs and allow fellowship training opportunities. Through grant mechanisms, funding will support the career development of clinicians and research doctorates focusing their research on the synthesis, generation and translation of new scientific evidence and analytic tools for patient-centered health research. In particular, the goal will be to enhance the research and methodological capacity for conducting and improving the quality of systematic review, retrospective studies, and clinical trials comparing the effectiveness of different health care interventions and the development of data sources and other aspects of the research infrastructure.

Funding in FY 2011 Request will be used for further capacity building. AHRQ will provide institutional support and will support the career development of clinicians and research doctorates focusing their research on the synthesis, generation and translation of new scientific evidence and analytic tools for patient-centered health research. FY 2011 funding will also be used to fund the out-years of grants awarded in prior years with annually appropriated funds.

VII. Citizen Forum (Stakeholder Engagement) - \$12.00 million

Stakeholder engagement means consistently and comprehensively involving stakeholders in all aspects of the Effective Health Care Program.

In FY 2008 and FY 2009, there were many ways for stakeholders to get involved in AHRQ's Effective Health Care Program, including: submitting suggestions for research topics, commenting on draft key questions and draft reports, providing expert input/scientific information to inform a report, and participating in a listening session. In addition, the Effective Health Care Program Stakeholder Group supports the work of the Effective Health Care Program.

AHRQ will use FY 2009/2010 Recovery Act funding to establish and support a Citizen Forum on Effective Health Care to formally engage stakeholders in the entire Effective Health Care enterprise and to continue to open up and make the program inclusive and transparent. This initiative will build on the smaller initiative that has guided AHRQ's Effective Health Care Program until now and will be an important component for a larger and more sustained national initiative in patient-centered health research, translation, and use. Funds may be used to develop formal processes for input, convene citizen panels in accordance with the processes that are developed, and convene a workgroup to provide formal advice and guidance to the Program. Funds may also support programs in citizen awareness addressing the use of evidence on the effectiveness of different health care interventions in health care decision-making. These programs, developed under the guidance of the Citizens Forum, may include town hall meetings, web-based information exchange, and community-based grassroots awareness efforts.

The FY 2011 Request will support the Citizen Forum on Effective Health Care to be established with Recovery Act funds in FY 2010. Funds will be used to support the formal processes developed to solicit and receive input, convene citizen panels, and convene workgroup(s) to provide formal advice and guidance to the Program.

D. Outputs and Outcomes Tables

Program: Patient-Centered Health Research

Long-Term Objective : Improve patient's quality of care and health outcomes through informed decision making by patients, providers and policymakers

Please see AHRQ's On-Line Performance Appendix (available at <http://www.ahrq.gov/about/cj2011/cj11opa.htm>) for all of the portfolio's measures, including those that have been retired.

Measure	Most Recent Result	FY 2010 Target 1/	FY 2011 Target	FY 2011 +/- FY 2010
<p><u>1.3.24:</u> Decrease mortality from and increase receipt of recommended care for subset of diseases measured and reported on in the National Health Care Quality Report)</p> <p><i>(Developmental)</i> <i>(Interim Output)</i></p>	<p>FY 2009: Measures have been identified and a subset based on priority conditions has been analyzed. (Target Met)</p>	<p>Initiate development of alternate measure to more accurately measure the program goals</p>	<p>Set Baseline</p>	<p>NA</p>
<p><u>4.4.5:</u> Increase the number of Effective Health Care (EHC) Program products available for use by clinicians, consumers, and policymakers <i>(Outcome)</i></p>	<p>FY 2009: 6 SRs 13 SGs 16 EHC Research Reports (Target Met)</p>	<p>3 SRs 6 SGs 14 EHC Research Reports</p>	<p>1 SRs 2 SGs 7 EHC Research Reports</p>	<p>-13 Products</p>
<p><u>1.3.25:</u> Increase the dissemination of Effective Health Care (EHC) Program products to clinicians, consumers, and policymakers to promote the communication of evidence about the comparative effectiveness of different medical interventions. <i>(Output)</i></p>	<p>FY 2009: 934 Baseline (Orders for 50+ copies of EHC Program products)</p>	<p>981 Orders</p>	<p>1030 Orders</p>	<p>+49 Orders</p>
<p><u>1.3.26:</u> Increase the percentage of stakeholders who report they use Effective Health Care (EHC) Program products as a resource <i>(Output)</i></p>	<p>FY 2009: 20% Baseline</p>	<p>22%</p>	<p>24%</p>	<p>+2%</p>

Measure	Most Recent Result	FY 2010 Target 1/	FY 2011 Target	FY 2011 +/- FY 2010
1.3.55: Increase the use of Effective Health Care (EHC) Program products in evidence-based clinical practice guidelines, quality measures, and measure sets in EHC priority areas to enhance decision making	NA	Set Baseline	Establish Targets	NA
Comparative Effectiveness (Dollars in Millions)	\$50.000	\$21.000	\$272.750	+\$251.750

1/ FY 2010 targets reflect activities associated with annually-appropriated dollars. Please see "Recovery Act Obligations and Performance" on page 7 for additional performance targets related to this portfolio using Recovery Act funds.

E. Mechanism Table for Patient-Centered Health Research

AGENCY FOR HEALTHCARE RESEARCH AND QUALITY
Patient-Centered Health Research Mechanism Table
(Dollars in Thousands)

	FY 2009 Actual		FY 2010 Appropriation		FY 2011 Request	
	No.	Dollars	No.	Dollars	No.	Dollars
RESEARCH GRANTS						
Non-Competing.....	3	447	37	12,500	33	10,500
New & Competing.....	43	12,100	0	0	105	105,750
Supplemental.....		0	0	0	0	0
TOTAL, RESEARCH GRANTS.....	46	12,547	37	12,500	138	116,250
TOTAL CONTRACTS/IAAs.....		37,453		8,500		156,500
TOTAL.....		50,000		21,000		272,750

Prevention/Care Management

	FY 2009 Enacted	FY 2009 Recovery Act	FY 2010 Appropriation Level	FY 2011 President's Budget	FY 2011 +/- FY 2010
TOTAL					
--BA	\$ -	\$ -	\$ -	\$ -	\$ -
--PHS Eval	\$ 7,100,000	\$ -	\$ 15,904,000	\$ 15,904,000	\$ -

Authorizing Legislation: Title III and IX and Section 937(c) of the Public Health Service Act
 FY 2009 Authorization.....Expired
 Allocation Method.....Competitive Grant/Cooperative Agreement, Contracts, and Other.

A. Program Description and Accomplishments

In FY 2008, two portfolios of work were combined to form the new Prevention/Care Management Portfolio (P/CM). The mission of the new Portfolio is to improve the quality, safety, efficiency, and effectiveness of the delivery of evidence-based preventive services and chronic care management in ambulatory care settings.

We seek to accomplish our mission by:

1. Supporting clinical decision-making for preventive services through the generation of new knowledge, the synthesis of evidence, and the dissemination and implementation of evidence-based recommendations; and,
2. Supporting the evidence base for and implementation of activities to improve primary care and clinical outcomes through
 - health care redesign;
 - clinical-community linkages;
 - self management support;
 - integration of health information technology; and
 - care coordination.

By 2010, integration of Prevention and Care Management into one Portfolio will be complete and work will continue to support the new strategic goals. Performance measure 2.3.6, which was created to capture activities and outcomes of integrating the two portfolios of work, will be retired.

Research Grants

Optimizing Care for Complex Patients

In FY 2009, the AHRQ Prevention/Care Management Portfolio continued funding for 18 previously awarded grants. These exploratory grants will contribute evidence to help guide the appropriate prioritization, timing, and provision of therapeutic and preventive services in individuals with multiple chronic conditions. This work will improve the ability of clinicians, patients and policy makers to identify those interventions that provide the greatest benefit to patients with multiple conditions and help patients make informed decisions about health care choices.

In FY 2009, we awarded 3 new grants to foster innovative collaborations among existing grantees. One collaboration, for example, addresses the important issue of risk prediction modeling in patients with type 2 diabetes and other co-morbidities and will validate a risk prediction model and extend the model to subgroups of patients including: those with co-morbid conditions such as depression, pulmonary disease and cancer, minorities, and the elderly. Funding for these grants will continue in FY 2010.

This work begins to build the necessary research infrastructure for future investigations on the population of patients with multiple chronic diseases.

Transformation of Primary Care

The patient-centered medical home (PCMH) has been proposed by a broad coalition of providers, employers, insurers and others as a model for improving primary care in the U.S., and numerous health care systems and medical groups are currently attempting to transform their primary care practices into PCMHs. These attempts go beyond incremental quality improvement activities and aim toward whole practice redesign. The Portfolio and AHRQ have identified the need for research that will identify, describe and disseminate the best methods for transforming the structure, characteristics and function of primary care so that practices can improve quality, reduce costs, and better satisfy the needs of patients and families.

In FY 2009, AHRQ published a funding opportunity announcement to support systematic studies of on-going, successful efforts to transform the delivery of primary care in the U.S. The Portfolio anticipates awarding 10-12, two-year grants in FY 2010 with continued funding in FY 2011. The research funded through this announcement will first validate that healthcare quality, as reflected in quantifiable changes in process and outcome measures, has in fact improved subsequent to practice transformation into a PCMH. Investigators will then study in detail how the transformation occurred and its impact on costs of care and actual patient and provider experiences/satisfaction. In addition, investigators will study the organizational and contextual factors within practices that have influenced the success of these efforts.

Other Grants

In response to Agency program announcements, the Portfolio regularly funds investigator-initiated grants for small and large research projects, conferences, and training that support prevention and care management goals. This funding has been provided in FY2009 and will be continued in FY 2010 and FY 2011.

Research Contracts

Goal 1: Support Clinical Decision-making for Preventive Services

The AHRQ Prevention/Care Management Portfolio fulfills AHRQ's congressionally mandated role to convene the United States Preventive Services Task Force (USPSTF). It supports the development of tools, materials and technical assistance to improve the delivery of evidence-based primary care. Other Activities in support of Goal 1 in FY 2009 and FY 2010 are the design of a new website that will feature the Agency's work in prevention and care management; and the creation of materials on prevention and chronic care for electronic tools.

Support of the U.S. Preventive Services Task Force

The USPSTF is mandated to conduct scientific evidence reviews of a broad array of clinical preventive services (screening, counseling, and preventive medication) and to develop recommendations for the health care provider community. The portfolio provides ongoing administrative, research, technical, and dissemination support to the USPSTF, which is an independent panel of nationally renowned, non-Federal experts in prevention and evidence-based medicine comprising primary care clinicians (e.g., internists, pediatricians, family physicians, gynecologists/obstetricians, nurses, and health behavior specialists) with strong science backgrounds.

Support of the U.S. Preventive Services Task Force includes funding for: Evidence-based Practice Centers to conduct systematic evidence reviews; three in-person meetings per year; and support of a rotation for preventive medicine residents to intern with the USPSTF.

In FY 2009, the USPSTF published eleven recommendations on clinical preventive services. USPSTF recommendations are based on evidence reviews conducted by Evidence-based Practice Centers and in-house by AHRQ staff.

In 2009, the Oregon EPC conducted seven systematic evidence reviews and presented the findings to the full Task Force during its in-person meetings. The EPC contract also provides for methodology support to the Task Force. Funds requested in FY 2010 and FY 2011 will support additional systematic reviews and continuing methodology support.

As reflected in key outcome measures for FY 2008 and FY 2009, portfolio staff prioritized knowledge generation and dissemination and implementation work in the area of screening for colorectal cancer. This preventive service was prioritized because current rates of uptake of screening for colorectal cancer are low, colorectal cancer is the third most common cancer in the United States, and there are health disparities in receipt of the service.

In 2009, two reports were published in *Annals of Internal Medicine* in conjunction with the publication of the updated USPSTF recommendation on Screening for Colorectal Cancer. These included a systematic evidence review conducted by the Oregon Evidence-based Practice Center¹ and a decision analysis of colorectal cancer screening tests that focused on age to begin and end screening, and on screening intervals. This work was conducted by the Cancer Intervention and Surveillance Modeling Network (CISNET).²

Based on this evidence, the USPSTF recommended screening for CRC using fecal occult blood testing, sigmoidoscopy, or colonoscopy, in adults beginning at age 50 years and continuing until age 75 years. For the first time, the USPSTF recommended that screening for CRC should stop after age 85, and it recommended *against routine* screening for adults age 76-85. Finally, the USPSTF found insufficient evidence to assess the benefits and harms of computed tomographic colonography and fecal DNA testing as screening modalities for colorectal cancer.

USPSTF recommendations provide one essential foundation for dissemination, implementation, and integration activities within the portfolio. In FY 2009, portfolio staff worked with The Centers for Medicare & Medicaid Services (CMS) and the National Committee on Quality Assurance (NCQA) to inform national coverage decisions and

¹ Whitlock EP, Lin JS, Liles E, Beil TL and Fu R. (2008) Screening for colorectal cancer: A targeted, updated systematic review for the U.S. Preventive Services Task Force. *AIM*; 149 (9): 638-658.

² Zauber AG, Lansdorp-Vogelaar I, Knudsen AB, Wilschut J, van Ballegooijen M and Kuntz KM. (2008). Evaluating test strategies for colorectal cancer screening: A decision analysis for the U.S. Preventive Services Task Force. *AIM*; 149 (9): 659-669.

performance measures on screening for colorectal cancer. For example, portfolio staff, the Chair of the USPSTF, and the principal investigators of the evidence reports referenced above gave several presentations on the evidence regarding screening for CRC using CT colonography and the rationale for the USPSTF recommendations. These presentations were made to staff at The Centers for Medicare & Medicaid Services (CMS) and the Medicare Evidence Development & Coverage Advisory Committee (MEDCAC).

In FY 2009, portfolio staff continued to serve as full and active members of the National Colorectal Cancer Roundtable, and participated in a joint project with Federal and non-Federal partners to translate implementation guidance into more accessible electronic formats to improve the delivery of screening. This electronic tool is available at <http://www.nccrt.org/Documents/General/IncreaseColorectalCancerScreeningRates.pdf>.

Performance measure 2.3.4 will be retired at the end of FY 2009. This performance measure was created to capture work associated with a prioritized topic area in the no-longer-existing Prevention Portfolio. The new Prevention/Care Management Portfolio has proposed a developmental, composite measure, performance measure 2.3.7 (Increase the percentage of older adults who receive appropriate clinical preventive services), which will look at older adults' receipt of appropriate clinical preventive services; colorectal cancer screening is expected to be included in this composite measure.

In FY 2008, to fulfill performance measure 2.3.5, portfolio staff prioritized a clinical preventive service. P/CM Portfolio staff selected a counseling service, Counseling to Promote a Healthy Lifestyle (which includes diet and physical activity), as a priority area for work in upcoming years. Since this work will support the new strategic goals of the Prevention/Care Management Portfolio, performance measure 2.3.5 will be replaced by performance measure 2.3.9 (Increase rates of adults who report receiving counseling about a healthy diet and physical activity from their primary care practice.)

In FY 2009, AHRQ commissioned a work plan from the Oregon Evidence-based Practice Center to update the USPSTF recommendations on counseling to promote a healthy diet and physical activity. The final work plan approved by the USPSTF is primarily designed to address the effectiveness of primary care-relevant counseling interventions to improve diet and physical activity, with a focus on the reduction of cardiovascular disease and related chronic diseases in adults. In addition to examining behavioral outcomes, the final evidence review will also report on relevant intermediate outcomes (e.g., measures related to diabetes, hypertension, dyslipidemia, and weight), and distal health outcomes (death, and morbidity related to cardiovascular disease). The final evidence reports will be completed in FY 2010. Also, in FY 2010, portfolio staff will complete a dissemination and implementation situational analysis on counseling to promote a healthy diet and physical activity in order to guide portfolio efforts in this area.

Each of the P/CM measures, 2.3.7, 2.3.8, and 2.3.9, is in the developmental stages. During FY 2010 and FY 2011, the targets consist of intermediate outputs representing activities that will support the development of a baseline for each measure and out-year targets.

Portfolio staff have been working with the USPSTF to increase the transparency of its scientific and deliberative processes with the overarching goals of assuring integrity and fidelity of process and of aligning more closely with the processes developed by AHRQ for its Patient-Centered Health Research program. In FY 2010, AHRQ staff will continue and expand this work in coordination with final outcomes of current pending congressional legislation regarding the USPSTF.

Other Activities

In FY 2009 and FY 2010, the Portfolio will support the design of a new website that will feature the Agency's work in prevention and care management. Given the enacted budget for FY 2010 and FY 2011, the Portfolio will support other activities related to Goal 1 including the creation of materials on prevention and chronic care for electronic tools.

- **Prevention and Care Management Website** - The new website will effectively communicate evidence-based clinical preventive services recommendations and provide information on how to implement them in clinical settings, and it will provide information on how to support systems changes that improve the delivery of preventive and chronic care services in primary care. Redesign work began in FY 2009 and will be completed in FY 2011.
- **Prevention and Chronic Care Materials for Electronic Tools** – The Portfolio will support contracts to create, enhance or evaluate health content for use in primary care via electronic health records or electronic tools.
- **Improvements and Upgrades to the electronic Preventive Services Selector (ePSS)** - The ePSS was developed to make the evidence-based recommendations of the US Preventive Services Task Force available to primary care clinicians at the point of care. Available both as a Web-based tool and in PDA-downloadable form, the ePSS provides clinical decision support in user-friendly formats, allowing clinicians to search for USPSTF recommendations based on specific patient characteristics or to browse recommendations by topic.
(<http://epss.ahrq.gov/PDA/index.jsp>)

Evaluations of the ePSS indicate that clinicians like it, use it, and want more from it. In particular, clinicians would like to be able to access and print reliable, literacy-level appropriate information for their patients that will help clinicians and patients make decisions about preventive services. In FY 2010 and FY 2011, the Portfolio will invest in formative research, development of new content and possibly new features for the ePSS. New materials are intended for use at the point of care by clinicians and consumers in the process of shared decision-making regarding the use of clinical preventive services. The materials may also be used on the redesigned AHRQ Preventive Services/Care Management Web site.

- **Improving Patient Education Materials for Electronic Health Records**
Approximately one-third of American adults have limited health literacy. This means, for example, that they are unable to determine a proper dose of a medication based on an over-the-counter label. Limited health literacy can also affect comprehension of verbal communication. Electronic health records (EHRs) have the capacity to deliver not only print patient education materials, but also to be an educational tool for clinicians to use interactively with patients. For example, the EHR could contain anatomical drawing or interactive visuals that clinicians could use while educating patients about their condition. Furthermore, EHRs can include features that encourage clinicians to confirm patient understanding, such as a field that indicates patient's comprehension level.

In FY 2010 and FY 2011, the Portfolio will support work to develop a rating system for judging the understandability of patient education materials that includes testing materials with diverse target audience members; to review patient education features of the 15 most prevalent EHRs, including what materials (print and on-screen graphics) are imbedded in the EHR and whether materials are easy to understand, whether the EHR can integrate additional patient education materials, and whether there are any prompts to review and confirm understanding of materials; to identify easy-to-read patient education materials in the public domain on the topics covered by EHRs; and to educate EHR vendors about Americans' health literacy levels, the readability of EHR patient education materials, the availability of easy-to-read materials, and the importance of clinicians' review of materials with patients and confirmation patient.

Goal 2: Support Health System Redesign to Improve Primary Care

The AHRQ Prevention/Care Management Portfolio supports the development of tools, materials and technical assistance to facilitate health systems redesign in primary care settings. Focus areas include: health systems redesign, self management support; linking clinical practices with community resources; and, care coordination. With additional funds made available through the FY 2010 and FY 2011 budgets, the Portfolio will invest in a small number of contracts in these areas. This work will build on projects started in FY 2009.

Health Systems Redesign

In 2010, the Portfolio will invest in expanding work begun in 2009 to support primary care transformation through exploration of the model of the patient-centered medical home. In 2010, the Portfolio will create a national learning network for initiatives using practice coaches to support quality improvement in primary care practices and develop a public website on the patient-centered medical home aimed at policy makers and health service researchers.

In FY 2010, the Portfolio also will support projects that focus on understanding and measuring the patient's experience in primary care through the development and validation of two modules of the Consumer Assessment of Healthcare Providers and Systems (CAHPS). The CAHPS program develops and supports the use of a comprehensive and evolving family of standardized surveys that ask consumers and patients to report on and evaluate their experiences with health care. These surveys cover topics that are important to consumers, such as the communication skills of providers and the accessibility of services. One new survey module (specific set of questions on a particular topic) will focus on primary care and one will focus on health literacy.

Self Management Support

Self-management support programs are expected to reduce costly health crises and improve health outcomes for chronically ill patients with conditions such as asthma, cardiovascular disease, depression, diabetes, heart failure, and migraine headaches. A successful self-management support program has the potential to change individuals' behavior, improve health outcomes, decrease the burden of chronically ill patients on the health care system, and be a cornerstone of primary care transformation. However, many practicing primary care clinicians have not had the opportunity to develop skills in self-management support or the opportunity to implement this aspect of the Care Model in their work.

In FY 2010, the Portfolio will award a two-year contract to produce multimedia resources for primary care clinicians to help them learn about self-management support, develop their self-management support skills and provide patients with self management guidance. This project will support both prevention and care management related goals, bridging the two parts of the portfolio.

Also, building on work started in FY 2009, the Portfolio will continue work with the Indian Health Service to help understand and test what electronic health record elements can assist in improving the consistent delivery and documentation of self management support. Two challenges related to self management support are what elements can be integrated into the EHR to help prompt and document self management support (e.g., goal setting, action planning, follow-up), and what key measure(s) should be collected from the electronic record to drive performance improvement. In addition, this project will explore the development and use of personal health records to support self management.

Linking Clinical Practices with Community Resources

The Portfolio supports work to develop the evidence base for and implementation of linkages between clinical practices and community/public health resources to promote healthy behaviors and prevent disease. In FY 2008, with the American Medical Association and the Association of State and Territorial Health Officials, AHRQ co-sponsored *Linking Clinical Practice and the Community for Health Promotion*, a summit aimed at encouraging collaboration, coordination, and integration among health care providers, institutions, and community resources. Participants examined successful partnerships at health system, community, and State levels, and identified strategies to overcome partnership barriers.

In FY 2009, in order to facilitate ongoing collaboration among summit participants and to disseminate their work to a larger audience, a special resource page was added to AHRQ's Web-based Innovations Exchange (<http://www.innovations.ahrq.gov>). Innovation profiles and tools from the Innovations Exchange collection address promoting healthy behaviors and linkages among health care delivery, public health, and community-based interventions.

In FY 2010, AHRQ will host a national Summit involving stakeholders from public health, community services, and primary care. The Portfolio will make additional investments to advance knowledge in this area using funds available from the enacted FY 2010 and FY 2011 budgets. In FY 2010, the Portfolio will support rapid cycle research using the Practice-based Research Networks to study how primary care practices can best link to community resources to support patients and families in preventing and managing obesity.

Care Coordination

In 2009, in response to stakeholder input, AHRQ began an 18-month foundational phase in a long-term process to develop quality measures for care coordination in ambulatory primary care settings. The work began with development of a measurement framework and a detailed, systematic review of potential existing measures. In late 2010, the first phase of this work will be completed and AHRQ intends to initiate the second planned phase of this work—developing and validating specifications for a small set of measures. In 2011, AHRQ expects to continue work on this project with a goal of launching a measure dissemination initiative in 2011 or 2012. Please note that AHRQ will seek National Quality Forum (NQF) endorsement for the care coordination measures developed through this process. The main role/purpose of NQF is to convene stakeholders to create national consensus/endorsement of evidence-based quality measures. NQF itself, however, does not develop measures. The AHRQ process has been and will continue to be aligned with the NQF process with a long-

term goal of seeking NQF endorsement of care coordination measures developed through this process.

B. Funding History

Funding for the Prevention/Care Management program during the last five years has been as follows:

<u>Year</u>	<u>Dollars</u>
2006	\$7,100,000
2007	\$7,100,000
2008	\$7,100,000
2009	\$7,100,000
2010	\$15,904,000

C. Budget Request

The FY 2011 Request level for Prevention and Care Management is \$15,904,000, the same level as the FY 2010 Appropriation. These funds will allow AHRQ to continue funding important research on prevention and care management, including the following:

Prevention/Care Management Activities (in millions of dollars)

	FY 2009 Enacted	FY 2010 Appropriation	FY 2011 Request
GRANTS:			
Generating New Knowledge in Prevention and Care Management	\$3.700	\$0.458	\$0.000
Transformation of Primary Care	0.000	3.200	3.200
Other Investigator-initiated Prevention and Care Management Grants	0.328	0.842	1.300
Subtotal, Grants	\$4.028	\$4.500	\$4.500
CONTRACTS:			
<i>Goal 1: Support Clinical Decision-making for Preventive Services</i>			
Support of the Preventive Services Task Force	2.122	2.700	3.700
Other Activities	0.300	2.900	2.300
<i>Goal 2: Support Health System Redesign to Improve Primary Care</i>			
	0.650	5.804	5.404
Subtotal, Contracts	\$3.072	\$11.404	\$11.404
Total, Prevention/Care Management Activities	\$7.100	\$15.904	\$15.904

Research and Training Grants:

The FY 2011 Request for Prevention/Care Management provides \$4,500,000 for research and training grants, the same level of support as the FY 2010 Appropriation. Of this total, \$1,300,000 will be directed to new grants. In FY 2011:

- AHRQ will continue to fund large grants that develop the evidence base for care of patients with multiple chronic conditions as well as other grants that support new knowledge in prevention and care management.
- AHRQ will provide continuation funding for grants funded in FY 2010 related to systematic studies of on-going, successful efforts to transform the delivery of primary care in the U.S. The Portfolio anticipates awarding 10-12, two-year grants in FY 2010 with continued funding in FY 2011.
- AHRQ anticipates funding other large and small grants related to prevention and care management research.

Research Contracts and IAAs:

The FY 2011 Request for Prevention/Care Management provides \$11,404,000 for research contracts and IAAs, the same level of support as the FY 2010 Appropriation. In FY 2011:

- The Prevention/Care Management portfolio will devote an additional \$1,000,000 to support the U.S. Preventive Services Task Force (USPSTF), including Evidence-based Practice Centers to conduct systematic evidence reviews for use by the USPSTF in making recommendations on clinical preventive services. These additional funds will enable the Task Force to increase the number of annually published recommendations from 9-12 to a total of 15. Support will also be provided to convene the USPSTF 3 times during the fiscal year and will support the training of preventive medicine and primary care residents in evidence-based medicine.
- Work will be initiated to support the development of tools, materials and technical assistance to improve the delivery of evidence-based primary care.
- The Prevention/Care Management portfolio will also generate and synthesize knowledge and support implementation activities to improve primary care and clinical outcomes through health care redesign; clinical-community linkages; self management support; and care coordination.

By 2010, the integration of Prevention and Care Management into one portfolio will be complete and work will continue to support the new strategic goals. In FY 2009, work began with Agency sponsored evaluators to establish performance measures and data sources to reflect the work of the new integrated Prevention and Care Management portfolio. We are proposing two new, developmental measures: 2.3.7 To increase the percentage of older adults who receive appropriate clinical preventive services, and 2.3.8 To increase the number of adults with chronic conditions who: 1) experience high quality care coordination; 2) receive self management support; or, 3) have access to clinical care coordinated with resources in the community. Each measure reflects one of the integrated prevention/care management portfolio's strategic goals.

Findings from the grant program, *Optimizing Prevention and Healthcare Management in Complex Patients*, will be available in 2010. The results may be used to guide the development of a funding opportunity announcement for grants that implement the results of the exploratory studies.

In FY 2010, work will be completed on two systematic evidence reviews for the USPSTF, one on counseling to promote a healthy diet and one on counseling to promote physical activity. These reports will assist the Task Force in making a bundled recommendation on counseling to promote a healthy lifestyle to be implemented in clinical practice. Portfolio staff will finalize the strategic plan for dissemination and implementation work in this topic area. These interim outputs ultimately support the appropriate delivery of this service to Americans.

In FY 2010, AHRQ will continue to support work promoting the development of effective clinical-community linkages. We will sponsor a Summit of stakeholders to identify and share best practices. We also will award 10-12 grants to study processes and characteristics of models of successful primary care transformation.

D. Outputs and Outcomes Tables

Program: Prevention/Care Management

Long-Term Objective: To improve the quality, safety, efficiency, and effectiveness of the delivery of evidence-based preventive services and chronic care management in ambulatory care settings.

Performance Trends: In FY 2008, the USPSTF released 10 recommendations on preventive services. In FY 2009, it released 11 new recommendations. AHRQ will continue to provide a high level of support to the USPSTF in FY 2010 and will increase its support in FY 2011 with the expectation that the USPSTF will increase the number of recommendation statements released in FY 2012.

Please see AHRQ's On-Line Performance Appendix (available at <http://www.ahrq.gov/about/cj2011/cj11opa.htm>) for all of the portfolio's measures, including those that have been retired.

Measure	Most Recent Result	FY 2010 Target	FY 2011 Target	FY 2011 +/- FY 2010
2.3.7: Increase the percentage of older adults who receive appropriate clinical preventive services	N/A	Develop specifications for 2 composite measures	Obtain findings from the limited competition grant program, Accelerating the Development of Methods for the Study of Complex Patients Draft final evidence reports on understanding prevention in older adults: one to focus on patient values and one on geriatric syndromes	NA

Measure	Most Recent Result	FY 2010 Target	FY 2011 Target	FY 2011 +/- FY 2010
<p><u>2.3.8:</u> Increase the number of adults with chronic conditions who: 1) experience high quality care coordination; 2) receive self management support; or, 3) have access to clinical care coordinated with resources in the community. <i>(Developmental)</i></p>	N/A	<p>Develop culturally-appropriate curriculum for clinical teams to support self management</p> <p>Develop report on current state of knowledge and models linking clinical practices with community resources</p>	Final report on implementation of a toolkit to facilitate change in primary care and the role of practice coaching	NA
<p><u>2.3.9:</u> Increase rates of adults who report receiving counseling about a healthy diet and physical activity from their primary care practice.</p>	N/A	<p>Develop evidence reports on counseling to promote a healthy diet and physical activity</p> <p>Develop dissemination and implementation situational analysis for counseling to promote a healthy diet and physical activity</p>	<p>Update USPSTF recommendation(s) on counseling to promote a healthy diet and physical activity</p> <p>Develop Baseline</p>	NA
Prevention/Care Management (Dollars in Millions)		\$15.904	\$15.904	+\$0

E. Mechanism Table for Prevention/Care Management

AGENCY FOR HEALTHCARE RESEARCH AND QUALITY
Prevention/Care Management Mechanism Table
(Dollars in Thousands)

	FY 2009 Actual		FY 2010 Appropriation		FY 2011 Request	
	<u>No.</u>	<u>Dollars</u>	<u>No.</u>	<u>Dollars</u>	<u>No.</u>	<u>Dollars</u>
RESEARCH GRANTS						
Non-Competing.....	16	3,448	3	458	10	3,200
New & Competing.....	3	580	27	4,042	4	1,300
Supplemental.....		<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
TOTAL, RESEARCH GRANTS.....	19	4,028	30	4,500	14	4,500
TOTAL CONTRACTS/IAAs.....		3,072		11,404		11,404
TOTAL.....		7,100		15,904		15,904

Value

	FY 2009 Enacted	FY 2009 Recovery Act	FY 2010 Appropriation Level	FY 2011 President's Budget	FY 2011 +/- FY 2010
TOTAL					
--BA	\$ -	\$ -	\$ -	\$ -	\$ -
--PHS Eval	\$ 3,730,000	\$ -	\$ 3,730,000	\$ 3,730,000	\$ -

Authorizing Legislation: Title III and IX and Section 937(c) of the Public Health Service Act
 FY 2009 Authorization.....Expired
 Allocation Method.....Competitive Grant/Cooperative Agreement, Contracts, and Other.

A. Program Description and Accomplishments

The cost of health care has been growing at an unsustainable rate, even as quality and safety challenges continue. Finding a way to achieve greater value in health care – reducing unnecessary costs and waste while maintaining or improving quality – is a critical national need. AHRQ’s Value portfolio aims to meet this need by producing the measures, data, tools, evidence and strategies that health care organizations, systems, insurers, purchasers, and policymakers need to improve the value and affordability of health care. The aim is to create a high-value system, in which providers produce greater value, consumers and payers choose value, and the payment system rewards value. In 2010 and 2011, AHRQ will continue to support the Value portfolio through three interrelated activities:

- Evidence and data to support policy, reporting, payment, and improvement strategies.** The Value Portfolio provides evidence to guide policy-makers and other decision-makers who are seeking to improve value through changes in legislation, payment, insurance and benefits policy, and public reporting, and to support provider efforts to increase the quality and efficiency of the delivery system. Evidence is needed on which payment strategies and community approaches are most likely to improve value, when and how public reporting strategies will work, what insurance expansions will increase access and at what cost, how consumers and patients react to financial and other incentives, what factors enable communities to improve health and efficiency of the local health care market and delivery system, and what redesign initiatives are likely to reduce waste.

Through this activity, in 2008 we were able to provide policymakers, system leaders, and regional health improvement collaboratives with 13 new reports, and evaluations (more than double the number anticipated) on topics such as provider incentives, consumer incentives, measuring efficiency, consumer-friendly public reporting templates, ways to identify populations with high numbers of potentially preventable hospital admissions, strategies for reducing waste, etc. This material provided the core curriculum for various Learning Networks and achieved wide visibility across the country with employers, providers, consumers, and others seeking major improvements in value. In 2009, we added another 8, bringing our cumulative total to 21, exceeding our target of 18. A few

examples include 1) an evidence-based decision guide developed for purchasers, health plans, providers and others who are measuring quality and efficiency of health care, and 2) new research published on the impact of safety events on costly hospital readmissions – calling for health plans to improve incentives for safety. A priority for 2010 is continuing to build the evidence base for value and efficiency, and we expect at least 10 new tools and reports, including an evidence-based decision guide on public reporting. This is supported by key output measure #1.3.31. In 2011, AHRQ expects this target to increase by an additional 10 evidence-based databases, reports and evaluations on healthcare value.

A related effort of the Value portfolio in 2009 has been development of a plan to synchronize and improve the data available for health policymakers. The goal is to bring together and improve information from across the agency and outside the agency. In the spring of 2009 we convened a small group of policy-makers, researchers and producers of health care data to begin creation of a strategy to maximize the availability of information and data. The goal was to identify major data needs, data gaps, and strategies for filling these needs. A meeting summary has been posted on the Web (see <http://www.ahrq.gov/data/hinfosum.htm>).

We already have begun implementation of several recommendations from this stakeholder meeting: We funded an initiative to begin to extend simulation capacity to provider-based data; began projects to enhance the timeliness of this data; and facilitated state efforts to develop all-claims data that cross sites of care. We also published the first National Emergency Department Database, which provides nationwide data on emergency department visits for all patients including the uninsured. Finally, we enhanced the capacity of MEPS modeling efforts to predict “future state” economic models, projecting health care expenditures and utilization, estimating the impact of changes in financing, coverage, and reimbursement policy, and determining who benefits and who bears the cost of a change in policy.

In 2010 and 2011, we will continue to produce data and evidence to inform, track, report, and improve value and efficiency, and we will continue to implement strategies to fill the gaps identified. A major push will be developing further synergies among AHRQ’s data efforts and continuing development of data and research partnerships across the department and the private sector. We also will continue to conduct, fund and publish research on some of the key policy levers, payer strategies and improvement efforts affecting the cost and value of healthcare: payment, consumer and patient incentives, insurance design, public reporting, and community-based quality improvement initiatives.

- **Measures and tools for policy-making, transparency, and improvement**
Any effort to build value must rest on evidence-based measures and solid, Federal, State and local data on cost and quality. AHRQ has a long history of development and maintenance of measures and data that the Department, private purchasers, States and providers are using for quality reporting and improvement. Examples include the Consumer Assessment of Healthcare Providers and Systems (CAHPS®), Quality Indicators, National Healthcare Quality and Disparities Reports, Culture of Safety measures, the Healthcare Cost and Utilization Project, and the Medical Expenditure Panel Surveys.

A second major priority of the Value initiative, therefore, is development and expansion of measures and tools to support policy decision-making, public transparency, public reporting, payment initiatives, and quality improvement. We saw several major

successes in FY 2008: The National Quality Forum endorsed 41 of our Quality Indicators for public reporting, and CMS selected 9 of these for use in Inpatient Payment. (Quality Indicators are measures of health care quality that make use of readily available hospital inpatient administrative data. These include measures of hospital safety, quality of care inside hospitals and potentially avoidable hospital admissions.) CMS also began to report data from AHRQ's Hospital CAHPS measure. (The Hospital CAHPS is a patient questionnaire used to assess patients' hospital care experience.) The National Healthcare Quality and Disparities Report had an efficiency chapter for the first time, and we published a comprehensive Evidence Review on Efficiency measures. The Evidence studied included peer reviewed economic and health care literature along with information collected through interviews with organizations developing efficiency measures.

By the end of FY 2009, 17 States had public report cards on health care quality using AHRQ quality measures, more than double the number anticipated, and representing over half the U.S. population. A new Quality Indicators Learning Institute helps these States use the indicators effectively, and provides technical assistance to new States or communities as they plan their public reporting efforts. In 2009 we also did two rounds of beta-testing for a new tool – My Own Network Powered by AHRQ (MONAHRQ) that gives States, communities, and others the software they need to build their own Web sites for public reporting and quality improvement. It includes, for example, a mapping tool designed to identify the prevalence and cost of potentially preventable hospitalizations, by county; and evidence-based reporting templates to facilitate reporting of quality scores in a way consumers can understand.

In addition, to help states estimate the burden and financial impact of chronic diseases among their Medicaid beneficiaries, a collaboration with CDC, RTI International, the National Association of Chronic Disease Directors, and the National Pharmaceutical Council, led to the development of a Chronic Disease Cost Calculator. The Chronic Disease Cost Calculator is a downloadable tool that supports states in: (1) Estimating state Medicaid expenditures for six chronic diseases – congestive heart failure, heart disease, stroke, hypertension, cancer, and diabetes, and (2) Generating estimates of the costs to Medicaid of selected chronic diseases using customized inputs (e.g., prevalence rates and treatment costs).

In 2010 and 2011, we will continue to build and refine measures of quality and efficiency, and to develop tools to facilitate their use. This will include the development of hospital readmission measures. MONAHRQ will go live in early FY 2010, and a new Learning Network will help states and communities make maximum use of this new tool. In the meantime, we will be working to expand and improve it to include new measures and new capabilities.

- **Implementation partnerships.** Because the goal of the portfolio is not simply to produce evidence, measures and tools but to facilitate evidence-based improvements in efficiency and value, a central component of the portfolio is working with key stakeholders who are using measures, data and evidence to bring about change. For example:

Practice-Based Networks: AHRQ works with practice based-networks to identify and roll out practices to reduce waste and improve quality. One such network is the Accelerating Change and Transformation in Organizations and Networks (ACTION), a network of 15 practice-based consortia that are based in hospitals, nursing homes,

home care agencies, group practices and other sites that have expertise in rapid deployment of proven best practices. In 2008 and 2009, for example Denver Health's safety net hospital launched a system redesign project based on Lean/Toyota Production Systems where staff were trained to analyze sources of waste, solve problems, and start implementing solutions in just one week. Teams and individuals came up with short- turnaround ideas for improving care and reducing waste, saving over \$11 million to date. Another ACTION project to develop and implement novel strategies to reduce Methicillin-resistant Staphylococcus aureus (MRSA) in hospitals resulted in a new hybrid approach that was implemented in ICUs in several hospital systems in Indianapolis; a follow-on project will enhance, expand, and spread these implementation approaches to new hospitals and to additional non-ICU hospital units in the previously participating hospitals.

A second AHRQ initiative supports primary care practice-based research networks (PBRNs). PBRNs are groups of primary care clinicians and practices working together to answer community-based health care questions and translate research findings into practice. PBRNs engage primary care clinicians and the communities they serve in both research and quality improvement activities and strive to build an evidence-based culture in primary care practice to improve the health of all Americans. In addition to hosting a national online PBRN resource center, AHRQ maintains master contracts with a group of 10 PBRN consortia to conduct rapid-cycle research. In 2009, PBRNs in Colorado and North Carolina conducted ground breaking work to determine the costs of data collection and reporting related to external quality measurement initiatives. The findings will be published in the *Annals of Family Medicine* (scheduled for publication in 2010).

Similarly, an HIV Research Network (HIVRN) has identified and implemented strategies to reduce the number of drug interactions. Through its data collection across 19 sites of HIV-patient care, the HIVRN routinely alerts individual sites about patients who were receiving inappropriate combinations of antiretroviral drugs. This has significantly reduced the number of HIV patients receiving inappropriate HIV drug regimens – for example, over a 2-year period, the number of patients receiving a particular inappropriate drug combination (tenofovir and unboosted atazanavir) was reduced by 34 percent within the network of 19 sites.

Community-Based Networks: AHRQ's partnership with a set of 24 Community Quality Collaboratives (known as Chartered Value Exchanges) provides a vehicle for community-wide improvement in quality and value. These collaboratives include representatives of four key stakeholder groups (public and private purchasers, providers, health plans, and consumers), and in some cases also include State data organizations, Quality Improvement Organizations, and health information exchanges. They take research findings on public reporting, payment, waste reduction, and quality improvement and implement them across communities and entire States.

AHRQ began chartering Community Quality Collaboratives in 2008, and currently 24 communities are chartered. AHRQ originally expected the groups to represent 300,000 people by the end of 2008, but they actually represented more than one-third of the U.S. population (124 million people) and include over 450 health care leaders – primarily because the collaboratives themselves are large, in most cases covering entire States.

Given the broad areas and populations represented by the 24 Community Quality Collaboratives, we plan to focus on meeting the needs of these existing collaboratives through 2010 and 2011 rather than forming new ones. To help us do so, in 2009 AHRQ recompeted a contract for a Learning Network to provide them with technical assistance and new evidence-based tools for quality/efficiency measurement, public reporting, and quality improvement. This Learning Network gives all the Community Quality Collaboratives access to organized peer learning, webinars, one-on-one consulting, and other support by top researchers and consultants.

Federal policy-makers and public payers. Federal policy-makers are a critical audience for the Value Portfolio. Particularly at a time when the nation is focused on ways to improve quality and safety, reduce waste, and improve access, there is considerable policy interest in AHRQ analyses, data, measures and tools on the impact of insurance design, payment strategies, consumer financial incentives on costs and expenditures, access and quality. During 2009, the Portfolio published statistical briefs on policy-related issues related to costs, expenditures, shared peer-reviewed articles on critical policy-related findings, and provided substantive assistance to federal policymakers in DHHS, the Office of the Secretary and Congress to inform health initiatives under consideration focused on issues of efficiency and value. The Portfolio also works closely with the Centers for Medicare and Medicaid Services and other sister agencies in their role as purchasers of care. Because the Federal Government is the largest purchaser of health care, major improvements in Value will require the active collaboration of Federal payers. In FY 2008 AHRQ established a forum to facilitate coordination across public payers and this work will continue. AHRQ convened a series of meetings among Federal departments and agencies with health care responsibilities to discuss issues related to payment and quality of care. Currently, AHRQ continues to communicate with Federal partners (e.g., CMS, CDC, DOD, etc.) to harmonize efforts in the areas of payment, quality improvement, and creating incentives for providers and beneficiaries to seek high-value care.

In FY 2011, we will maintain the following measures:

1.3.29: Increase the number of States or communities reporting market-level hospital cost data. This measure was implemented in FY 2008, and the target for FY 2008 was 4 states. However, staff realized that it would be more efficient to work with all 16 states in the 1st year rather than incrementally over several years as originally planned. Further, AHRQ believes 16 states is the maximum number achievable to date, since other states do not appear to be receptive to reporting market-level hospital cost data at present. Therefore, the maximum number achievable (16), was reached in FY 2009. Although the program does not anticipate an increase in the number of States or communities reporting data, total target levels for FY 2010 and FY 2011 will be maintained at 16.

1.3.30: Increase the number of communities or States with public report cards. We only anticipate the total number of public report cards to increase by 1 each year (2010, 2011). Given that the science behind public reporting is so new, communities and States are currently focused on improving their current report cards rather than creating new ones.

1.3.31: Increase the cumulative number of databases, data enhancements, articles, analyses, reports, and evaluations on healthcare value.

In 2010, we plan to retire the following measures and replace them with new measures:

1.3.27: Increase the number of people who are served by community collaboratives that are using evidence-based measures, data, and interventions to increase health care efficiency and quality.

Reason for Retirement: The original target for this measure was 300,000, but by 2008, 124 million was achieved. Since we far exceeded the original target, we plan to now focus on working with the existing 24 Chartered Value Exchanges (CVEs) and the populations they serve.

1.3.28: Increase the # of CVEs

Reason for Retirement: 25 value exchanges were chartered in 2008, and 24 are currently chartered (1 collaborative was de-chartered when it failed to meet the chartering criteria). Given the broad areas and populations represented, we plan to focus on the 24 existing CVEs, to help them in their community-wide and State-wide public reporting, payment, and quality improvement efforts, rather than recruit more CVEs. Prior to chartering CVEs, AHRQ was aware of at least 50 "community leaders" that might have the potential to become CVEs. However, some of these community leaders did not qualify to become CVEs since they did not meet the criteria of representation from all 4 stakeholder groups (purchaser, health plan, provider, and consumer). Therefore, we've chartered the maximum number of community quality collaboratives that meet the criteria to become Chartered Value Exchanges.

1.3.29: Increase the number of States or communities reporting market-level hospital cost data.

Reason for Retirement: The original target was for 4 States, but we have already reached the maximum target of 16 States producing cost-level data. These are the only states with the infrastructure and capability of producing these data. The outyear target (16) was the maximum number achievable, and it was completed in the first year. Since this measure was developed, we've recognized the need to develop measures that more broadly cover the portfolio goals. Although the retired measure had focused too narrowly on one project within the portfolio, progress within the measure will be tracked internally and captured under the new, broader measure proposed.

The new proposed measures are:

1.3.50: SYNTHESIS. Increase the cumulative number of AHRQ measures, tools, upgrades, and syntheses available on healthcare value.

1.3.51: DISSEMINATION. Increase the cumulative number of measures, datasets, tools, articles, analyses, reports, and evaluations on healthcare value that are disseminated. These products will be disseminated by AHRQ and its learning networks.

1.3.53: Increase the cumulative number of AHRQ measures and tools used in national, state, or community public report cards.

1.3.54: Increase the cumulative *use* of AHRQ articles, analyses, reports, evaluations, measures, datasets, and tools on healthcare value by various stakeholder groups such as purchasers of health care, health plans, providers and consumers. We will measure use through the AHRQ Learning Networks targeting these stakeholders (e.g., Learning Network

for Community Quality Collaboratives, MONAHRQ Learning Network, etc.).

B. Funding History

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

<u>Year</u>	<u>Dollars</u>
2006	\$ 687,060
2007	\$3,730,000
2008	\$3,730,000
2009	\$3,730,000
2010	\$3,730,000

C. Budget Request

The FY 2011 Request level provides \$3,730,000, the same as the FY 2010 Appropriation. These funds will permit us to accomplish the following:

Value Portfolio Activities (in millions of dollars)

	FY 2009 Enacted	FY 2010 Appropriation	FY 2011 Request
GRANTS:			
None	\$0.000	\$0.000	\$0.000
CONTRACTS:			
Evidence and Data for Improving Value	\$1.060	\$0.760	\$1.300
Measures and Tools for Reporting, Payment and Value Improvement	1.040	1.900	1.430
Accelerating Implementation	1.630	1.070	1.000
Total, Value Portfolio	\$3.730	\$3.730	\$3.730

Research Contracts and IAAs:

The FY 2011 Request provides \$3,730,000 for research contracts and IAAs for the Value portfolio, the same level of support as the FY 2010 Appropriation. In FY 2011, the Value portfolio will:

- Build the evidence base available on healthcare value and strategies for improving it (increasing healthcare quality and reducing costs) by developing new measures, databases, tools and evaluations to support transparency, public reporting, payment initiatives, and quality improvement. In FY 2011, AHRQ will focus on expanding MONAHRQ, and will works towards development of new findings on and measures for public reporting.
- Disseminate new measures, databases, reports and tools to health care decision makers and organizations that will use these measures and tools in national, state and community report cards of health care performance.

D. Outputs and Outcomes Tables

Program: Value

Long-Term Objective: Consumers and patients are served by healthcare organizations that reduce unnecessary costs (waste) while maintaining or improving quality.

Performance Trends: The FY 2009 target for Measure 1.3.31 was 18, but the actual result was 21. The target was exceeded because of articles that were published sooner than we had anticipated. The remaining measures are new and will not have baseline results until 2010.

Please see AHRQ's On-Line Performance Appendix (available at <http://www.ahrq.gov/about/cj2011/cj11opa.htm>) for all of the portfolio's measures, including those that have been retired.

Measure	Most Recent Result	FY 2010 Target	FY 2011 Target	FY 2011 +/- FY 2010
1.3.29: Increase the number of States or communities reporting market-level hospital cost data	FY2009: 16	Maintain at 16	Maintain at 16	0
1.3.30: Increase the cumulative number of communities or States with public report cards	FY 2009: 18	19	20	+1
1.3.31: Increase the cumulative number of databases, data enhancements, articles, analyses, reports, and evaluations on health care value (<i>Output</i>)	FY 2009: 21 (Target Exceeded)	28	38	+10
1.3.50: SYNTHESIS_Increase the cumulative number of AHRQ measures, tools, upgrades, and syntheses available on healthcare value.	N/A	41	46	+5
1.3.51: DISSEMINATION_Increase the cumulative number of measures, datasets, tools, articles, analyses, reports, and evaluations on healthcare value that are disseminated.	N/A	10	20	+10
1.3.53: Increase the cumulative number of AHRQ measures and tools used in national, state, or community public report cards.	N/A	18	21	+3

Measure	Most Recent Result	FY 2010 Target	FY 2011 Target	FY 2011 +/- FY 2010
1.3.54: Increase the cumulative use of AHRQ articles, analyses, reports, evaluations, measures, datasets, and tools on healthcare value and strategies.	N/A	10	20	+10
Value Research Portfolio (Dollars in Millions)		\$3.730	\$3.730	\$0

E. Mechanism Table for the Value Portfolio

AGENCY FOR HEALTHCARE RESEARCH AND QUALITY
Value Mechanism Table
(Dollars in Thousands)

	FY 2009 Actual		FY 2010 Appropriation		FY 2011 Request	
	No.	Dollars	No.	Dollars	No.	Dollars
RESEARCH GRANTS						
Non-Competing.....	0	0	0	0	0	0
New & Competing.....	0	0	0	0	0	0
Supplemental.....	0	0	0	0	0	0
TOTAL, RESEARCH GRANTS.....	0	0	0	0	0	0
TOTAL CONTRACTS/IAAs.....		3,730		3,730		3,730
TOTAL.....		3,730		3,730		3,730

Health Information Technology

	FY 2009 Enacted	FY 2009 Recovery Act	FY 2010 Appropriation Level	FY 2011 President's Budget	FY 2011 +/- FY 2010
TOTAL					
--BA	\$ -	\$ -	\$ -	\$ -	\$ -
--PHS Eval	\$ 44,820,000	\$ -	\$ 27,645,000	\$ 31,522,000	\$ 3,877,000

Authorizing Legislation: Title III and IX and Section 937(c) of the Public Health Service Act
 FY 2009 Authorization.....Expired
 Allocation Method.....Competitive Grant/Cooperative Agreement, Contracts, and Other.

A. Program Description and Accomplishments

As the Nation's lead research agency on health care quality, safety, efficiency, and effectiveness, AHRQ plays a critical role in the nation's effort to drive adoption and meaningful use of Health Information Technology (Health IT). Established in 2004, the purpose of the Health IT portfolio at AHRQ is to develop and disseminate evidence and evidence-based tools to inform policy and practice on how health IT can improve the quality of American health care. This portfolio serves numerous stakeholders, including health care organizations planning, implementing, and evaluating health IT, health services researchers, policymakers and other decisionmakers. The portfolio achieves these goals through funding research grants and contracts, synthesizing findings, and developing and disseminating findings and tools.

Research Grants:

Conclusion of Transforming Healthcare Quality Through IT (THQIT) Grant Program

In 2004 and 2005 AHRQ initiated a \$132 million grant program to assess the ability of primarily small and rural hospitals to plan, implement and demonstrate the value of health IT. 2009 represented the conclusion of this series of grants, the largest ever single investment in understanding barriers and drivers on how health IT can impact quality, and provides a unique and timely opportunity to leverage these lessons to inform today's national drive for adoption and meaningful use of health IT. While the program has posted project summaries, publications and final reports from each of the 100+ grantees in this program on the National Resource Center for Health IT (NRC) web site (www.healthit.ahrq.gov), the program has begun to synthesize the lessons from individual projects to identify best practices and broader trends. In addition to developing a series of "Emerging Lessons Learned" papers (and posted on the NRC), in 2009 AHRQ awarded a contract to synthesize the findings from this grant program as a whole. The results are expected to be available beginning in December 2011.

Ongoing Ambulatory Safety and Quality (ASQ) Grant Program

The Ambulatory Safety and Quality (ASQ) program accentuates the role of health information technology (health IT) through awards in three areas: quality measurement, quality improvement, and patient-centered care through health IT. While most grant activities in the ASQ program are still in progress, the program has begun to develop emerging lessons learned based on a limited number of completed grants and insights gained from grant activities to date. A key subset of grants in this program with prime relevance to current national health IT initiatives is the

program's EQM or Equalizing Quality Management, which seeks to identify and overcome barriers to quality reporting. All the ASQ non-competing grants that began in FY 2006 will end in FY 2010.

Health IT Program Announcements

In FY 2009, the Health IT portfolio developed three standing funding opportunities to address research to support the program's three strategic focus areas: the use of health IT to support patient-centered care and transitions in care; clinical decision support (CDS) and improved decisionmaking; and the effective use of electronic prescribing and medication management. The program awarded grants to support real world demonstration projects that evaluate facilitators and barriers associated with successful health IT implementation and use and ultimately improved health care outcomes, as well as grants to support short-term preparatory, pilot or feasibility studies that will inform larger scale real world health IT implementation and use or the conduct of more comprehensive health IT implementation research

Some recent achievements and research findings funded through Health IT grants include:

- AHRQ funded research showed significant cost savings can be achieved when formulary decision support (FDS) is available in e-prescribing applications. Clinicians using e-prescribing with FDS were significantly more likely to prescribe tier 1 medications, and the potential financial savings were substantial. Widespread use of e-prescribing systems with FDS could result in reduced spending on medications.
(http://healthit.ahrq.gov/portal/server.pt/gateway/PTARGS_0_3882_868892_0_0_18/Prescribing_Patterns_of_PREFERRED.pdf)
- AHRQ funded researchers have developed a specialized health IT tool, called the "Smart Form," to facilitate documentation-based clinical decision support (CDS). The form, which is tied to electronic medical records, organizes clinical data in a disease-focused manner to help in decision making. It also highlights and requests coded information, such as height, weight, and smoking status. The form also is designed to fit into workflow before, after, and during the clinical visit where CDS systems should have the biggest impact on provider behavior. (<http://www.ahrq.gov/research/jan09/0109RA3.htm>).
- AHRQ funded researchers have also been studying patient use of secure messaging within a shared medical record, and found that use of secure messaging varied according to individual clinical, social and demographic characteristics.
(http://healthit.ahrq.gov/portal/server.pt/gateway/PTARGS_0_3882_898612_0_0_18/09-0096.pdf).

Other Grants

Other AHRQ grant programs support the mission of the health IT portfolio by convening conferences related to health IT, training future researchers, and conducting relevant research. Specifically, the health IT portfolio has funded conference grants, training grants, and a Center for Education and Research on Therapeutics (CERT). These projects are still ongoing, and when completed their results will be disseminated with other health IT-funded evidence.

Research Contracts:

National Resource Center for Health IT (NRC) and NRC 2.0 Launch

The Health IT portfolio disseminates its products and delivers technical assistance through its online National Resource Center for Health IT (NRC – available at www.healthit.ahrq.gov), Web conferences, and direct participation in select meetings, workgroups and journals. Usage of the NRC Web site, both by the program’s intended audiences and by fellow federal entities focused on health IT has continued to grow.

In anticipation of the continued growth of the NRC and the conclusion of the initial 5-year contract for the NRC, in 2009 AHRQ re-competed and awarded a series of Master Task Order Contracts to support the next generation of the NRC as well as an initial set of fifteen tasks to support core NRC operations and program research activities. Some key AHRQ program tasks awarded under the NRC in 2009 include:

- Operation of the NRC web, national webinar and technical assistance infrastructure.
- Synthesis of findings from 132 THQIT grantees and six state and regional health information exchange (HIE) demonstrations.
- Support for the use of health IT in the Patient Centered Medical Home, a promising model of care that aims to lower costs and improve quality by reorganizing the way primary care practices deliver care.
- Marketing and dissemination strategy and support.

Activities to Inform Other AHRQ Portfolios and Support Agency Goals

The AHRQ Health IT program continues to collaborate and inform other AHRQ programs in support of Agency goals. Some key activities by the Health IT program to inform and support other AHRQ portfolios include:

- Providing technical assistance to the AHRQ Comparative Effectiveness Program to develop and refine ARRA-funded registry contracts
- Design and implementation of the Patient Safety Organization national reporting system.
- Work with the Agency’s Center for Delivery and Organization of Markets in support of measure development activities.
- Work with the Prevention and Care Management Portfolio in support of efforts to establish a research agenda and federal collaborative efforts around the Patient Centered Medical Home (PCMH)

In cooperation with the Agency’s Long Term Care (LTC) program, AHRQ is establishing a specialized research center to support enhancing care management and transition in care for the elderly. This project will fund a consortium to conduct multiple, inter-related projects that are focused on the role of communications and health information technologies in self-management and transitions in community-based care and services.

Activities to Inform National Health IT Initiatives and Overcome Barriers

Public and private entities continue to leverage AHRQ’s research products, researchers and insight to inform legislation, plan operations, and develop evaluation plans. AHRQ Health IT portfolio-funded researchers staff many of the key roles in the newly-formed Health IT Policy and Standards Federal Advisory Committees. AHRQ helped organize and participated in the April 2009 National Committee on Vital and Health Statistics (NCVHS) hearing that ONC and CMS held to help define “meaningful use” and the subsequent NCVHS hearing on “meaningful measures”. AHRQ continues to provide insight into best practices, evidence and evidence-based tools to inform and support public and private decision-makers, implementers, and researchers.

Also in 2009, the program leveraged its unique connection to AHRQ's other portfolios and centers and the nation's health IT research community as a rapid way to gather and deliver insight (via concise issue briefs) on key health IT issues to ONC and other program customers. The program held a series of "grantee open forums" (moderated listening sessions) with small (fewer than 10) numbers of program grantees on topics including: the feasibility and design of proposed meaningful use reporting requirements, meaningful use consumer engagement requirements, medication management and patient recruitment.

Poor usability and information design in electronic health record (EHR) systems remain a barrier to their adoption and meaningful use. AHRQ commissioned the creation and dissemination of two reports that synthesize the existing research and evidence in this area to guide the development of an objective EHR usability evaluation process and recommend policies to improve the usability and safety of EHR systems. Based on these recommendations, AHRQ awarded a follow-on contract to evaluate certified EHR vendor usability processes and practices and is driving coordination of AHRQ-funded EHR usability activities with NIST and ONC.

Clinical decision support (CDS) represents a key component of EHR systems to improve healthcare quality. In 2008, the program awarded \$5 million for two new contracts to advance the understanding of how best to incorporate CDS into health care delivery. While these projects are not yet complete, in 2009 AHRQ published and disseminated important white papers that assess the state of the field in CDS and provide insight on how to incorporate CDS into practice workflow. In addition, the program funded free public access to online access to the first chapter of "Improving Medication Use and Outcomes with Clinical Decision Support: A Step-by-Step Guide" to assist implementers of clinical decision support (CDS) tools, hosted a town hall meeting on CDS, and produced a series of podcasts on the topic. Finally, the program awarded a contract to develop and disseminate specifications for common clinical decision support rules, a project which healthcare organizations can directly use to support the Health Information Technology for Economic and Clinical Health (HITECH) Act requirements in this area.

Some recent activities related to quality measure reporting include:

- An AHRQ-funded report from the National Quality Forum advanced quality measurement using health IT by identifying standard codesets for all NQF-Endorsed quality measures and proposed a draft quality data set that could be adopted by health IT vendors.
- Mapping the AHRQ-funded U.S. Health Information Knowledgebase (USHIK), a metadata registry of health information data element definitions, values and information models that enables browsing, comparison, synchronization and harmonization within a uniform query and interface environment, to HITSP (Health IT Standards Panel) use cases, a key enabler for standardized electronic reporting.
- The program supported the National Committee on Vital and Health Statistics, an HHS advisory committee, in their recent hearings on meaningful use of health IT. Agency staff and AHRQ funded researchers organized the hearing and presented testimony on ways to improve the capacity and effectiveness of using health IT to measure and improve healthcare quality.

Driving establishment and sustainability of health information exchange (HIE) activities represents a significant goal of national health IT efforts and an area of ongoing support for the AHRQ health IT portfolio. In FY 2009, the program continued its support of six state and regional demonstrations of HIE, convening two in-person meetings for participants to share best practices

and inform recommendations for future activities in this area. In addition, the program published “Liability Coverage for Regional Health Information Organizations” based on lessons from its supported activities.

Other recent achievements and research findings funded through contracts related to Health IT include:

- Publication and dissemination of a high quality evidence report on *The Impact of Consumer Health Informatics Applications*. This report identifies significant evidence that consumer health informatics applications, electronic tools that are designed to interact directly with consumers and provide or use individualized (personal) information, impact health outcomes (<http://www.ahrq.gov/clinic/tp/chiapptp.htm>).
- Publication and dissemination of the program’s first ever Annual Report of Portfolio Funded Projects. This report provides both an overview of all of the AHRQ health IT program’s funded projects for CY2008 and detailed performance assessments for each activity. (<http://healthit.ahrq.gov/portal/server.pt?open=512&objID=654&&PageID=16758&mode=2>).
- Publication and dissemination of a report and two associated journal articles on health IT functionality to support proactive, prevention-focused primary care.
- AHRQ co-funded the very timely and widely cited, “Stimulating Health IT” edition of Health Affairs (March/April 2009), which detailed the most up to date research and commentary on health IT just as the ARRA was passed. It has subsequently been an invaluable resource for those responsible for implementing and overseeing the health IT provisions of ARRA. AHRQ staff and AHRQ-funded researchers contributed much of the content of the issue through selection by peer review. (<http://content.healthaffairs.org/content/vol28/issue2/index.dtl>).
- AHRQ conducted groundbreaking consumer focus groups across the Nation to better understand individuals’ perspectives and needs about their health information. This information is sorely needed to understand how the nation can best use health IT to improve health care quality for individuals.

Overall Performance Goals and Measures

The Health IT program at AHRQ set several ambitious performance measures in 2004, and has seen steady progress on all of the measures. (Please see AHRQ’s Online Performance Appendix (available at <http://www.ahrq.gov/about/cj2011/cj11opa.htm>) for measures the portfolio will be retiring in FY 2011.) The changing health IT landscape defined by the HITECH provisions of the Recovery Act and changing research needs of its customers require that the program evaluate its measurement strategy, retire measures that no longer make sense, and adopt new measures in support of these broader initiatives. As a result, the program has retired its historical performance measures and embarked on efforts to define appropriate measures and data sources. The program has established a project with experts in the field of performance measurement to develop a logic model and associated measures. In addition, the program has extended a project, begun in 2007, to identify data sources for potential performance measures and initiated a strategic planning process to refine its mission and goals to align with the goals of the agency and broader national health IT initiatives.

Program Assessments

The Health IT portfolio underwent a program assessment in 2008. As a result of the program assessment, the Health IT program has embarked on a plan to address issues raised by the assessment. Some recent key improvement activities include the development of efficiency and long-term outcome measures, gaining feedback on how to improve its Web site by conducting focus groups of program stakeholders and summarizing the results, developing multiple "how-to guides" for the NRC Web site (www.healthit.ahrq.gov), and developing and posting its first ever publicly available report on the aggregate and individual performance of its grantees and other funded projects.

(<http://healthit.ahrq.gov/portal/server.pt?open=512&objID=654&&PageID=16758&mode=2>).

The program has also begun to collect data on its two new performance measures. Delays in the availability of FY2007 NAMCS data and identification of inconsistencies within the data set have slowed the program's ability to establish targets and baseline its long-term outcome measure associated with the use of clinical decision support and improved adherence to anti-platelet therapy. The program received a preliminary analysis of 2007 NAMCS data on 9/30/09 that revealed irregularities in the data set (e.g. 16% of practices reporting that they did not have an EMR reported having notes capability in their EMR). In addition, analysis of 2005, 2006 and 2007 NAMCS data for trending reveals that values vary widely depending upon the parameters of data run specifications (e.g. weighting, inclusion / exclusion factors, etc.). The program is working to resolve the data issues.

The program is using the experience gained from developing its first ever Annual Report of Portfolio Funded Projects to inform establishment of a baseline for its approved efficiency measure associated with the per grantee cost of developing and posting grantee performance summary reports on the NRC. The program has provided guidance of \$6,023 per grantee as a baseline for this measure and will work to establish an actual baseline. In addition, the program has released a task through the NRC for 2010 to develop an Annual Report of Portfolio Funded Projects for calendar year 2009.

B. Funding History

Funding for the Health Information Technology program during the last 5 years has been as follows:

<u>Year</u>	<u>Dollars</u>
2006	\$49,886,000
2007	\$49,886,000
2008	\$44,820,000
2009	\$44,820,000
2010	\$27,645,000

C. Budget Request

The FY 2011 Request level for Health Information Technology is \$31,522,000, an increase of \$3,877,000 over the FY 2010 Appropriation. The Health IT portfolio will fund the following activities:

Health Information Technology Activities
(in millions of dollars)

	FY 2009 Enacted	FY 2010 Appropriation	FY 2011 Request
GRANTS:			
Utilizing Health IT to Improve Health Care Quality (ASQ RFA)	\$16.928	\$3.768	\$0.000
Grants Related to Health IT's 3 Program Announcements	6.120	6.576	9.923
Other Grants	2.654	2.405	3.047
Subtotal, Grants	\$25.702	\$12.749	\$12.970
CONTRACTS:			
National Resource Center for Health IT	6.450	5.500	6.450
Dissemination, Translation and Other Rapid Cycle Research Activities	12.668	9.396	12.102
Subtotal, Contracts	\$19.118	\$14.896	\$18.552
Total, Health IT Activities	\$44.820	\$27.645	\$31.522

Research and Training Grants:

The FY 2011 Request level provides \$12,970,000 in research and training grants for Health IT, an increase of \$221,000 over the FY 2010 Appropriated level. This level of support includes \$5,779,000 in continuing research grants for the Health IT portfolio, a decrease of \$6,970,000 from the FY 2010 Appropriated level. In FY 2011, the Health IT portfolio will re-invest all of the grants that end in FY 2011, plus an additional \$221,000, for a total level of \$7,191,000 in new research grants to advance the portfolio's mission and to support the portfolio's long-term outcome goals. These grants will be focused on demonstrating value and best approaches to broader diffusion, implementation, and effective use of health IT to improve the quality and safety of care. The program will continue to support ongoing program announcement grant activities and to synthesize and develop best practices, tools, and lessons learned (via contracts) for concluded grant activities.

Research Contracts and IAAs:

The FY 2011 Request provides \$18,552,000 for research contracts and IAAs, an increase of \$3,656,000 over the FY 2010 Appropriation. Of the increase, \$950,000 will be directed to the National Resource Center for Health IT and \$2,706,000 will be directed to dissemination, translation and other rapid cycle research activities.

National Resource Center for Health IT (NRC)

The National Resource Center for Health IT (NRC) will continue to serve both the program and other federal entities supporting health IT research and dissemination activities. The NRC, as both a dissemination vehicle and task order infrastructure tightly coupled with AHRQ's contracts management office, has proven to be an efficient and effective mechanism to support the research, infrastructure and administrative needs of the AHRQ Health IT program, other Agency

programs, ONC, CMS and other entities supporting Health IT activities through reimbursable agreements.

Dissemination, Translation and Other Rapid Cycle Research Contracts

The FY 2011 Request level will allow AHRQ to award projects that develop and disseminate evidence and evidence-based tools on the use of health IT to improve quality and support the meaningful use of health IT. AHRQ will continue to partner with our federal and private sector stakeholders to promote shared goals. Coupled with dissemination efforts, evidence and tools derived from AHRQ Health IT program research can inform implementation and policy activities to overcome barriers and drive adoption and meaningful use of Health IT. A key challenge to reaching FY 2010 performance goals are the many factors outside of AHRQ control which influence use of health IT, including payment policy, regulatory requirements, and clinical practice standards.

The program also anticipates expanding support for activities to inform other AHRQ portfolios and contribute to Agency goals. Of particular importance is the need for the Health IT portfolio to engage with activities of the comparative effectiveness and prevention and care management. .

IT Expenditures within the Health IT Portfolio

AHRQ's Health IT program develops and disseminates evidence and evidence-based tools on how health IT can impact the quality, safety, and efficiency of care delivery. Goals are achieved by funding research grants and contracts, synthesizing findings, and developing and disseminating findings and tools. This portfolio includes IT expenditures related the National Resource Center for Health IT. This project helps providers incorporate health IT into the healthcare system by sharing knowledge, findings, and best practices. It also provides direct technical assistance to AHRQ's grantees and supports effective dissemination of lessons learned.

D. Outputs and Outcomes Tables

Program: Health IT

Performance Trends: The Health IT portfolio at AHRQ set several ambitious performance measures in 2004, and has seen steady progress on all of the measures. Please see AHRQ's Online Performance Appendix (available at <http://www.ahrq.gov/about/cj2011/cj11opa.htm>) for measures the portfolio will be retiring in FY 2011. The changing health IT landscape defined by the HITECH provisions of ARRA and changing research needs of its customers requires that the program evaluate its measurement strategy, retire measures that no longer make sense, and adopt new measures in support of these broader initiatives. As a result, the program has retired its historical performance measures and embarked on efforts to define appropriate measures and data sources. The program has established a project with experts in the field of performance measurement to develop a logic model and associated measures. In addition, the program has extended a project, begun in 2007, to identify data sources for potential performance measures.

Measure	Most Recent Result	FY 2010 Target	FY 2011 Target	FY 2011 +/- FY 2010
1.3.48: Average cost per grantee of development and publication of annual performance reports and final reporting products on the AHRQ National Resource Center for Health IT (NRC) website (http://healthit.ahrq.gov). (Outcome)	FY 2009: \$6,023/grantee Baseline	\$5,842/grantee	\$5,661/grantee	-\$181/grantee
1.3.52: The percentage of visits to doctors' offices at which patients with coronary artery disease are prescribed antiplatelet therapy among doctors' offices that use electronic health records with clinical decision support (Outcome)	FY 2009: Conducted data analysis of NAMCS raw data files	Establish reliable data source and set baseline	Set out-year targets	NA
Health IT Portfolio (Dollars in Millions)		\$27.645	\$31.522	+\$3.877

E. Mechanism Table for Health IT

AGENCY FOR HEALTHCARE RESEARCH AND QUALITY
Health Information Technology Portfolio
(Dollars in Thousands)

	FY 2009 Actual		FY 2010 Appropriation		FY 2011 Request	
	No.	Dollars	No.	Dollars	No.	Dollars
RESEARCH GRANTS						
Non-Competing.....	52	18,078	45	12,749	20	5,779
New & Competing.....	34	7,624	0	0	24	7,191
Supplemental.....		0	0	0	0	0
TOTAL, RESEARCH GRANTS.....	86	25,702	45	12,749	44	12,970
TOTAL CONTRACTS/IAAs.....		19,118		14,896		18,552
TOTAL.....		44,820		27,645		31,522

Patient Safety

	FY 2009 Enacted	FY 2009 Recovery Act	FY 2010 Appropriation Level	FY 2011 President's Budget	FY 2011 +/- FY 2010
TOTAL					
--BA	\$ -	\$ -	\$ -	\$ -	\$ -
--PHS Eval	\$ 48,889,000	\$ -	\$ 90,585,000	\$ 64,622,000	\$ (25,963,000)

Authorizing Legislation: Title III and IX and Section 937(c) of the Public Health Service Act
 FY 2009 Authorization.....Expired
 Allocation Method.....Competitive Grant/Cooperative Agreement, Contracts, and Other.

A. Program Description and Accomplishments

Historically, the Patient Safety Program's goal has been to prevent, mitigate, and decrease the number of medical errors, patient safety risks and hazards, and quality gaps associated with health care and their harmful impact on patients. The program funds grants, contracts, and interagency agreements (IAAs) to support projects that identify the threats to patient safety and identify and evaluate effective safe practices. Projects within the program seek to educate multiple stakeholders including health care organizations, providers, policymakers, researchers, patients and others; disseminate information and implement initiatives to enhance patient safety and quality; and maintain vigilance to prevent patient harm.

The Patient Safety Program comprises two key components: (1) coordination of support for the creation, synthesis, dissemination, implementation, and use of knowledge about patient safety threats and medical errors and (2) operation of a program to establish Patient Safety Organizations (PSOs), which are a fundamental element of the Patient Safety and Quality Improvement Act (Patient Safety Act) of 2005.

The Patient Safety Program, which formally commenced in FY 2001, began with AHRQ awarding \$50 million for 94 new projects aimed at reducing medical errors and improving patient safety. Throughout the past 10 years, AHRQ has funded many additional projects and initiatives in a number of areas of patient safety and health care quality. Additionally, the Agency is working collaboratively with other HHS components to design and implement initiatives to reduce healthcare associated infections (HAIs). As a result, a large body of research continues to emerge, and numerous surveys, reporting and decision support systems, training and technical assistance opportunities, taxonomies, publications, guides, tools, and presentations are available for general use. AHRQ continues to work to address these patient safety issues independently and in collaboration with federal partners and public and private sector organizations, and does so by utilizing the various grant and contract mechanisms. The following section highlights some specific examples of projects that make up the Patient Safety Program.

Research Grants

- AHRQ continues to draw from the work of 17 Partnerships in Implementing Patient Safety (PIPS) two-year grants awarded to assist health care institutions in implementing safe practice interventions that show evidence of eliminating or reducing medical errors, risks, hazards, and harms associated with the process of care. The majority of these grants are completed and the resultant tool kits are being made available to the public and/or further tested in different environments to identify what easily works and what challenges are faced by providers in implementing these safe practice intervention tool kits. In FY 2010, AHRQ has issued a second funding opportunity announcement (PIPS II), which will build on the successful past effort.
- In September 2008, AHRQ awarded \$3,708,799 for 13 risk-informed intervention grants. These 3-year projects are ongoing, and build on previously funded risk assessment projects funded by AHRQ and support risk-informed development and implementation of safe practice interventions that have the potential of eliminating or reducing medical errors, risks, hazards, and harms associated with the process of care in the ambulatory setting. The objectives of the projects are to: (1) identify, develop, test, and implement safe practice interventions in ambulatory care settings, and (2) share the findings and lessons learned about the challenges and barriers to developing and implementing these interventions through toolkits. (Source: <http://www.ahrq.gov/qual/risk08.htm>.)
- During FY 2010, AHRQ plans to award \$9 million in new research and career-development grants that target the prevention of healthcare-associated infections (HAIs). The addition of AHRQ-funded grants on the topic of HAIs, which will continue in FY 2011, will further augment a growing Department-wide effort in this area. For more information about AHRQ's HAI research, please see the Contracts section below.
- In September 2009, President Obama announced to a joint session of Congress his intention to invest in new ways to resolve medical liability claims. In FY 2010, AHRQ will award \$25 million to study ways to put patient safety first while letting doctors focus on practicing medicine: \$23 million in grants to undertake multi-year demonstration and planning projects on the topic of Patient Safety and Medical Liability Reform, as well as \$2 million in contract funds for an evaluation of these demonstrations.

Research Contracts:

Resources/Tools

- AHRQ Patient Safety Network (AHRQ PSNet). AHRQ PSNet is a national Web-based resource featuring the latest news and essential resources on patient safety. The site offers weekly updates of patient safety literature, news, tools, and meetings ("What's New"), and a vast set of carefully annotated links to important research and other information on patient safety ("The Collection"). Supported by a robust patient safety taxonomy and Web architecture, AHRQ PSNet provides powerful searching and browsing capabilities, as well as the ability for diverse users to customize the site around their interests (My PSNet). In addition, AHRQ funds the WebM&M (Morbidity and Mortality Rounds on the Web). WebM&M is an online journal and forum on patient safety and health care quality. This site features expert analysis of medical errors reported anonymously by readers, interactive learning modules on patient safety ("Spotlight Cases"), Perspectives on Safety, and forums for online

discussion. Use of these sites has steadily increased over the past 4 years, with web sessions totaling more than 140,000 in July 2009.

- Team Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPPS™). In their 1999 report on medical errors, the Institute of Medicine (IOM) suggested that systemic failures were important underlying factors in medical error and that better teamwork and coordination could prevent harm to patients. The IOM recommended that health care organizations establish team training programs for personnel in critical care areas such as emergency departments, intensive care units, and operating rooms. As a follow up, AHRQ, in partnership with the Department of Defense, developed a teamwork training program – TeamSTEPPS™. It is an evidence-based teamwork system aimed at optimizing patient outcomes by improving communication and other teamwork skills among health care professionals. It includes a comprehensive set of ready-to-use materials and training curricula necessary to integrate teamwork principles successfully into an organization's health care system. TeamSTEPPS™ is presented in a multimedia format, with tools to help a health care organization plan, conduct, and evaluate its own team training program. It includes five components: (1) an instructor guide; (2) a multimedia resource kit including a CD-ROM and DVD with 9 video vignettes about how failures in teamwork and communication can place patients in jeopardy, and how successful teams can work to improve patient outcomes; (3) a spiral-bound pocket guide; (4) PowerPoint® presentations; and (5) a poster that tells staff that the organization is adopting TeamSTEPPS™. In addition, AHRQ has a technical assistance contract in place to support those interested in implementing TeamSTEPPS™. TeamSTEPPS National Implementation continues to grow and expand. As of the end of FY 2008, the project has trained or registered 651 individuals for TeamSTEPPS Master Trainers representing 147 different organizations across the United States. TeamSTEPPS is now part of the 9th Scope of Work for Quality Improvement Organizations (QIOs). All QIOs have received initial Master Team Training. To date, Master Trainers reported that they have trained 4,780 individuals from 119 organizations. In 2009, a new module, Rapid Response Systems, was added to the TeamSTEPPS™ set of tools. The module includes PowerPoint presentations, teaching modules, and video vignettes that can be used to train hospital staff. The focus of the module is to use groups of clinicians to bring critical care expertise to patients requiring immediate treatment. In 2010, the focus will be on additional training and dissemination of TeamSTEPPS.

AHRQ Healthcare-Associated Infections (HAIs) Activities

Due to increased Congressional interest in the prevention of healthcare-associated infections, the Agency has been awarded increasing amounts of funding to reduce HAIs, including methicillin-resistant Staphylococcus aureus (MRSA) infections. The following are brief descriptions of some HAI projects and initiatives.

MRSA Collaborative Research Initiatives

In FY 2008, Congress appropriated \$5,000,000 to AHRQ to identify and to help suppress the spread of MRSA and related HAIs. Until then, the only large scale study that had produced evidence on how to reduce serious HAIs and maintain that reduction was supported by AHRQ and carried out in 127 Michigan hospitals from 2003 – 2006. The FY 2008 efforts to reduce MRSA built on the Michigan initiative, known as the Keystone Project. Working in close collaboration with the Centers for Disease Control and Prevention (CDC) and the Centers for Medicare and Medicaid Services (CMS), projects were designed that would use electronic and administrative data, surveillance and implementation strategies to:

- Reduce the burden of MRSA infections via novel interventions aimed at critical control points in a community/region.
- Determine scope, risk factors, and control measures for hospital-acquired, community-onset MRSA infections.
- Test methods to reduce hospitalization from community-acquired MRSA.
- Understand the role of inter-facility MRSA transmission on overall infection rates.
- Understand the role of nursing home transmission on overall rates and delineate interventions that are effective in reducing such transmission.

A list of specific projects follows:

- Reduction of *Clostridium difficile* Infections in a Regional Collaborative of In-patient Health Care Settings
- Reducing the Overuse of Antibiotics by Primary Care Clinicians Treating Patients in Ambulatory and Long-term Care Settings
- Improving the Measurement of Surgical Site Infection (SSI) Risk Stratification and Outcome Detection
- Produce Rapid National, Regional and State-level Estimates of HAIs to Evaluate the Impact of Inter-Agency HAI Initiatives
- Reduction of Infections Caused by Carbapenem Resistant Enterobacteriaceae (KPC producing organisms) through Application of Recently Developed CDC/HICPAC Recommendations

In FY 2009, Congress more than doubled their appropriation to AHRQ with a total of \$17,304,000 in funding -- \$8 million specifically for MRSA and other infections and \$9 million for Comprehensive Unit-based Patient Safety Program (CUSP)/Central line-associated Blood Stream Infections (CLABSI). The CLABSI project is the nationwide implementation of the project successfully undertaken in Michigan – the Michigan Keystone Project. Using the same collaborative planning approach, the Agency worked in very close collaboration with CDC and CMS to identify and design appropriate projects that were funded through existing AHRQ contract mechanisms. Additionally, the planning teams used the DHHS Office of the Secretary's HAI National Action Plan to guide the selection of projects. Specifically, the \$8 million MRSA funds were allocated among the following targeted projects:

- Reduction of *Clostridium difficile* in Regional Collaborative of Inpatient Healthcare Settings through Implementation of Anti-microbial Stewardship (\$2 M)
- Reduction of the Overuse of Antibiotics by Primary Care Clinicians Treating Patients in Ambulatory and Long-term Care Settings (\$2 M)
- REDUCE MRSA: Randomized Evaluation Decolonization vs. Universal Clearance to Eliminate MRSA (\$1.5 M)
- Improve the Measurement of SSI Risk Stratification and Outcome Detection (\$500,000)
- Produce Rapid, national, Regional and State-level Estimates of HAIs to Evaluate the Impact of Inter-Agency HAI Initiatives (\$500,000)
- Reduce Infections Caused by KPC-Producing Organisms (\$500,000)
- SAUL: Standardizing Antibiotic Use in Long-term Care Settings (\$1 M)

The FY 2009 CUSP/CLABSI funds in the amount of \$9 million dollars were allocated accordingly:

- Expanded the CUSP/CLABSI initiative to include all states in the US, Puerto Rico, and the

District of Columbia, additional hospitals in each of the States, and in healthcare settings outside of the intensive care unit (\$6 M)

- CUSP model with Catheter-associated Urinary Tract Infections (\$1 M)
- Prevention of Surgical Site Infections implemented through the CMS Quality Improvement Organization (\$1 M)
- Prevention of Blood Stream Infections for Patients Undergoing Hemodialysis (\$1 M)

In FY 2010, with funding of \$34 million allocated for HAIs, AHRQ is poised to continue this work in close collaboration with our HHS partners from the Centers for Disease Control and Prevention and the Centers for Medicare and Medicaid Services. Approximately \$9 million of the FY 2010 budget will be utilized to fund a variety of grants related to HAI prevention. Detailed planning for specific projects to be accomplished via contracts is ongoing. To date, the following project topics have been identified for further development through the use of research contracts:

- Identifying Claims-based Surrogate Markers of HAIs originating in Ambulatory Surgical Centers (ASC)
- Optimizing Oral Decontamination Strategies for the Prevention of ventilator-associated pneumonia (VAP)
- Utility of Algorithm-based Antimicrobial Prescribing for ventilator-associated pneumonia (VAP) to Reduce Unnecessary Antimicrobial use in ICUs
- Nursing Home Antibiograms to Improve Antibiotic Prescribing for Patients Transferred to Emergency Departments
- Optimizing Pre-Operative Surgical Antibiotic Prophylaxis for the 21st Century
- Stopping *Staphylococcus aureus* Surgical Site Infections Before They Start
- Effect of the use of universal glove and gown on HAI rates and antibiotic-resistant bacteria
- Assessment of Novel Strategies for Preventing blood stream infections (BSI) in Patients Undergoing Hemodialysis
- Identifying modifiable human/organizational factors that are associated with successful implementation of an HAI Prevention Program
- A Regional Approach to HAI Infection Reduction in Dialysis Population
- Developing and Testing Best-Practices for the Detection and Diagnosis of *Clostridium difficile* in Hospitalized Patients

Other Patient Safety Contracts

AHRQ's Patient Safety portfolio also supports other dissemination, translation and rapid cycle research activities. These contracts include rapid cycle projects awarded through AHRQ's Accelerating Change and Transformation in Organizations and Networks (ACTION), Primary Care Practice-Based Research Networks (PBRNs), and the Planning, Evaluation and Analysis Task Order Contract (PEATOC) mechanisms. These projects address relevant issues such as quantifying the scope, magnitude, and impact of patient safety events, including risks and harms; identifying, developing, disseminating, and implementing safe practices; understanding and preventing healthcare-associated infections in a variety of healthcare settings.

Patient Safety Organizations (PSOs)

The Patient Safety and Quality Improvement Act (PSQIA) of 2005 amended the Public Health Service Act to foster a culture of safety in health care organizations. To encourage health care providers to work with PSOs, the Act (and implementing regulations) provides Federal confidentiality and privilege protections to deliberations carried out under the aegis of patient

safety organizations. This legal protection of information voluntarily reported to PSOs will promote increased reporting and analysis of patient safety events and subsequent improvements in care. The Act prohibits the use of these analyses in civil, administrative, or disciplinary proceedings and limits their use in criminal proceedings. AHRQ administers the provisions of the Patient Safety Act dealing with PSO operations. The Department of Health and Human Services (HHS) has issued regulations to implement the Patient Safety Act, which authorizes the creation of PSOs. The Agency's goals are to help advance the methodologies that identify the most important causes of threats to patient safety, identify best practices for addressing those threats, and share the lessons learned as widely as possible. Specific work to carry out the Act includes:

1. promulgating regulations to implement the Act;
2. developing systems to allow application by organizations to become PSOs;
3. listing successful applicant organizations as PSOs;
4. where appropriate, re-listing and de-listing PSOs;
5. maintaining a database of PSO administrative information;
6. providing technical assistance to PSOs; and
7. holding an annual meeting of PSOs.

AHRQ, in conjunction with the Office of the Secretary and the Office of Civil Rights, has made significant progress in implementing the Patient Safety Act. On November 21, 2008, regulations to implement the Act were published, and the regulations became effective January 19, 2009. AHRQ has currently listed 75 PSOs in 28 states and the District of Columbia.

In addition, AHRQ has continued development of common definitions and reporting formats (Common Formats) to describe patient safety events. Promulgation of these Common Formats, which will allow aggregation and analysis of events collected by Patient Safety Organizations and national reporting annually on patient safety, was authorized by the Act. Based upon feedback and comments received on Version 0.1 beta of the Common Formats, AHRQ announced the availability of Common Formats, v 1.0, in a Federal Register notice on September 2, 2009. AHRQ anticipates that the PSO Database will be operational in February, 2011.

Program Assessment and Looking Forward

Historically, the Patient Safety Program has concentrated most of its resources on evidence generation. While that activity continues to be important for AHRQ, increasingly, program support is moving more toward data development/reporting and dissemination/implementation as the Agency focuses on making demonstrable improvements in patient safety. This reporting and implementation focus has the advantage of providing a natural feedback loop that can highlight areas in which new evidence is most needed to address real quality and safety problems encountered by providers and patients. At the same time, the Patient Safety Program appreciates a clear need to balance investments in data development/reporting and dissemination and implementation with funding for more fundamental research in patient safety. This balance will support ongoing knowledge creation and a continuous cycle of improvement that encompasses both the discovery and application of safe healthcare practices.

Most of the measures for the patient safety program have been modified to better reflect goals. The new measures, effective in FY 2008, are provided in the Performance Table below. The new measures better reflect an emphasis on implementation of evidence-based practices and reporting on their impact. Two of the measures also enable capture of information on two major new Agency initiatives (i.e., PSOs and HAIs).

Currently, two Patient Safety measure have updated data to report for FY 2009.

- For measure 1.3.41, “Increase the number of tools that will be available in AHRQ’s inventory of evidence-based tools to improve patient safety and reduce the risk of patient harm,” a total of 81 tools are included in the inventory. The FY 2009 target was 76 tools.
- For measure 1.3.40, “Patient Safety Organizations (PSOs) listed by DHHS Secretary,” AHRQ has currently listed 75 PSOs in 28 states and the District of Columbia. The baseline for this measure was established in FY 2009. AHRQ’s FY 2011 target is 100 PSOs.

The Program had already taken the following actions in 2008 to improve performance:

- Measuring the number of PSOs that become certified based on Patient Safety and Quality Improvement Act legislation. The list of certified PSOs is available on an ongoing basis as PSOs become listed. (Please see <http://www.pso.ahrq.gov/listing/psolist.htm>)
- Establishing annual targets around the Patient Safety and Quality Improvement Act.
- Updating performance measures and targets. Patient Safety continues efforts to develop a data source to capture the use of AHRQ-supported tools.

The Patient Safety program underwent a program assessment in 2003, and was found to be performing adequately. The review cited improvements in the safety and quality of care as a strong attribute of the program. As a result of the program assessment, the program continued to take actions to prevent, mitigate and decrease the number of medical errors, patient safety risks and hazards associated with health care and their harmful impact on patients. The Patient Safety Program has also benefited from a robust effort aimed at evaluating the impact of projects that have been funded under this portion of AHRQ’s budget. In April 2009, summaries of the findings were published in a special issue of the journal *Health Services Research* (available at <http://www.hsr.org/hsr/issue.jsp?vid=44&iid=2.2>). The contents include a description of the evaluation framework and approach, along with other articles that address AHRQ Contributions to patient safety knowledge, experiences with implementation research, the Patient Safety Improvement Corps, and trends and challenges in measuring safety outcomes.

B. Funding History

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

<u>Year</u>	<u>Dollars</u>
2006	\$34,114,000
2007	\$34,114,000
2008	\$34,114,000
2009	\$48,889,000
2010	\$90,585,000

C. Budget Request

The FY 2011 Request level for the Patient Safety portfolio is \$64,622,000, a decrease of \$25,963,000 from the FY 2010 Appropriation (primarily due to the one-time funding of \$25 million in multi-year medical malpractice demonstrations in FY 2010). The Patient Safety Program is

comprised of two research components: Patient Safety Threats and Medical Errors (including HAIs) and PSOs. The activities funded in FY 2011 is provided on the following page:

Patient Safety Activities
(in millions of dollars)

	FY 2009 Enacted	FY 2010 Appropriation	FY 2011 Request
GRANTS:			
Partnerships in Implementing Patient Safety (PIPS) II Grants	\$0.000	\$4.000	\$4.000
Risk-informed Intervention Grants (RFA)	3.102	2.682	0.000
Healthcare-Associated Infections (Grants)	0.000	9.000	13.000
General Patient Safety Grants	6.491	4.902	7.584
Medical Malpractice Grants	0.000	23.000	0.000
Subtotal, Grants	\$9.593	\$43.584	\$24.584
CONTRACTS:			
<i>Resources & Tools</i>			
AHRQ PSNet/WebM&M	2.000	2.000	2.000
Team STEPPS	1.000	1.000	1.000
Patient Safety Organizations (PSOs)	7.000	7.000	7.000
Healthcare-Associated Infections (Contracts)	17.304	25.000	21.000
Medical Malpractice Evaluation	0.000	2.000	0.000
Other Contracts	11.992	10.001	9.038
Subtotal, Contracts	39.296	\$47.001	\$40.038
Total, Patient Safety Activities	\$48.889	\$90.585	\$64.622

Research and Training Grants:

The FY 2011 Request provides \$24,584,000 in research grants. The FY 2011 Request provides \$15,741,000 in continuing grants support and \$8,843,000 in new research grant support. The new FY 2011 grants will focus on two areas:

- \$4,000,000 is requested for new HAI research and training grants. These new grants will stimulate additional work in the field in order to identify, develop, disseminate and implement information about safe practices aimed at understanding optimal approaches to HAI prevention.
- \$4,843,000 is requested for new patient safety research and training grants focused on diagnostic error, ambulatory care patient safety intervention tool kit development, and CERTS pediatric patient safety.

At the FY 2011 Request level there is no continuation support for the Medical Malpractice Research Grant Program funded in FY 2010 at \$23,000,000 (note: an additional \$2 million is included in contracts to evaluate these demonstrations for a total of \$25 million). These grants were provided with multi-year funding authority and no support is required in FY 2011.

Research Contracts and IAAs:

The FY 2011 Request provides \$40,038,000 for Research Contracts and IAAs, a decrease of \$6,963,000 from the FY 2010 Appropriated level. This decrease is associated with the end of the Medical Malpractice Evaluation (-\$2,000,000), a shift of HAI contracts to new HAI research grants (-\$4,000,000), and a reduction in Other Contracts of \$963,000. This level of support will

allow the Patient Safety portfolio to support the following contracts:

- The AHRQ PSNet and the AHRQ WebM&M, both of which have a growing user base and high levels of customer satisfaction based on annual customer satisfaction surveys.
- Continue support of TeamSTEPPS™
- Patient safety evaluation activities
- Patient safety implementation projects conducted through our ACTION program
- Patient safety knowledge transfer projects
- Operation of the Medicare Patient Safety Monitoring System (MPSMS)
- Projects related to patient and family engagement and
- Patient safety culture measurement and survey development for use in community pharmacies

In terms of performance measures, in FY 2007 the patient safety portfolio was able to provide a baseline for the number of U.S. health care organizations using AHRQ-supported tools to improve patient safety – 382 hospitals. The FY 2008 target for this measure is 439 hospitals, increasing to 504 hospitals in FY 2009. In addition, AHRQ intends to increase the number of tools that will be available in AHRQ's inventory of evidence-based tools to improve patient safety and reduce the risk of patient harm. FY 2007 efforts focused on developing a baseline measure. The FY 2007 baseline for the inventory of evidence-based tools is 61 – AHRQ goal was to develop and additional 7 tools in 2008 (for a total of 68), 8 additional tools in FY 2009 (for a total of 76), and 10 additional tools in 2010 (for a total of 86). As noted below, the FY 2008 and 2009 targets were exceeded for this measure.

As part of ongoing efforts aimed at reducing and eliminating HAIs, AHRQ has helped to coordinate and execute the Department of Health and Human Services National Action Plan related to healthcare-associated infections. In FY 2009, \$17,304,000 in additional funds were made available for work in this important area. A portion of the additional funds are expanding a multi-State project to apply the approach that proved to be successful in the Michigan Keystone project to prevent central line associated blood stream infections (CLABSI). Significant reductions in these infections were achieved through a comprehensive unit-based safety program (CUSP) in intensive care units.

AHRQ will continue funding projects targeting a reduction of HAIs at \$34,000,000, the FY 2010 Budget level. Additional topics that are also being addressed as part of the HAI initiative include a focus on other infection sites (e.g., the urinary tract and surgical sites), hospital locations outside the ICU and other health care settings (e.g., nursing homes, outpatient clinics, etc.), as well as the prevention of additional types of infections (e.g., *Clostridium difficile*, and others) and contributing factors such as antibiotic overuse.

Patient Safety Organizations (PSOs)

Future work related to patient safety event information includes:

- specifying common definitions and reporting formats and disseminating it through notification in the Federal Register; (Version 1.1, March 31, 2010)
- establishing systems to help PSOs de-identify information (data on an individual patient, reporter, provider, or institution); (The Privacy Protection Center (PPC) accepts data from PSOs to make non identifiable – September 2010)

- developing a network of patient safety databases (NPSD) that will allow exchange of de-identified information among PSOs and reporting to AHRQ; NPSD begins to receive non-identifiable data – February 2011.
- publication annually in AHRQ’s National Healthcare Quality Reports (NHQR) information on national and regional statistics, including trends and patterns of health care errors. The NHQR is published annually, usually during the second quarter of each fiscal year.

Funding for this important Act will continue at the FY 2011 Request level at \$7,000,000. This level of support will enable AHRQ, working with the Secretary, to support PSO operations in FY 2011. (See measure 1.3.40.)

IT Expenditures within the Patient Safety Portfolio

This program coordinates support for the creation, synthesis, dissemination, implementation and use of knowledge about patient safety threats and medical errors. The goal is to prevent, mitigate, and decrease the number of medical errors, patient safety risks and hazards, and quality gaps associated with health care. The program relies heavily on data. The PS investments, along with crosscutting portfolio IT investments, support the ongoing effort to identify and disseminate information about patient safety threats and medical errors.

D. Outputs and Outcomes Tables

Program: Patient Safety

Long-Term Objective: Within five years, providers that implement evidence-based tools, interventions, and best practices will progressively improve their patient safety scores on standard measures (e.g., Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS), Hospital Survey of Patient Safety (HSOPS), Patient Safety Indicators (PSIs), and the Medical Office Survey on Patient Safety Culture.)

Performance Trends: The program exceeded the FY 2009 goal for listing PSOs as it reached 75 PSOs. This higher than expected number of listed PSOs within the first year is believed to be due in part to high interest in the rule.

The program also exceeded the FY 2009 goal for the number of tools available in AHRQ’s inventory of evidence-based tools to improve patient safety and reduce the risk of patient harm. At the end of FY 2009, 81 such tools were available. This number mostly likely resulted in part from adequate funding across the Patient Safety Program that enabled project leaders to effectively translate the results of research into practical, user-friendly tools.

Please see AHRQ’s On-Line Performance Appendix (available at <http://www.ahrq.gov/about/cj2011/cj11opa.htm>) for measures the portfolio will be retiring in FY 2011.

Measure	Most Recent Result	FY 2010 Target	FY 2011 Target	FY 2011 +/- FY 2010
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Measure	Most Recent Result	FY 2010 Target	FY 2011 Target	FY 2011 +/- FY 2010
<u>1.3.37</u> : Increase the percentage of hospitals in the U.S. using computer-only patient safety event reporting systems (PSERS) (<i>Outcome</i>)	FY 2006: 12% (Historical Actual)	34%	44%	+10%
<u>1.3.38</u> : Increase the number of U.S. healthcare organizations per year using AHRQ-supported tools to improve patient safety from the 2007 baseline (new portfolio measure) (<i>Outcome</i>)	FY 2007: 382 hospitals (Baseline)	580 hospitals	640 hospitals	+60
<u>1.3.39</u> : Increase the number of patient safety events (e.g. medical errors) reported to the Network of Patient Safety Databases (NPSD) from baseline. (<i>Outcome</i>)	FY 2009: Publication of Common Formats 1.0	Publication of technical specification for Common Format (V1.1)	NPSD Operational Establish Baseline	NA
<u>1.3.5</u> : Annual percentage reduction in the cost per capita of treating hospital-acquired infections per year Baseline actual in 2003:\$4,437.28 per capita (<i>Outcome</i>)	N/A	-2%	-2%	Maintain
<u>1.3.40</u> : Number of Patient Safety Organizations (PSOs) listed by HHS Secretary (<i>Outcome</i>)	FY 2009: 75 listed PSOs (Historical Actual)	85 listed PSOs	100 listed PSOs	+15 listed PSOs
<u>1.3.41</u> : Increase the number of tools available in AHRQ's inventory of evidence-based tools to improve patient safety and reduce the risk of patient harm (<i>Outcome</i>)	FY 2009: 81 (Target Exceeded)	86	92	+6
Patient Safety (Dollars in Millions)		\$90.585	\$60.622	-\$25.963

E. Mechanism Table for Patient Safety

AGENCY FOR HEALTHCARE RESEARCH AND QUALITY
General Patient Safety Portfolio
(Dollars in Thousands)

	FY 2009 Actual		FY 2010 Appropriation		FY 2011 Request	
	<u>No.</u>	<u>Dollars</u>	<u>No.</u>	<u>Dollars</u>	<u>No.</u>	<u>Dollars</u>
RESEARCH GRANTS						
Non-Competing.....	25	7,023	34	7,584	44	15,741
New & Competing.....	19	2,570	65	36,000	22	8,843
Supplemental.....		0	0	0	0	0
TOTAL, RESEARCH GRANTS.....	44	9,593	99	43,584	66	24,584
TOTAL CONTRACTS/IAAs.....		39,296		47,001		40,038
TOTAL.....		48,889		90,585		64,622

Crosscutting Activities Related to Quality, Effectiveness,

and Efficiency Research

	FY 2009 Enacted	FY 2009 Recovery Act	FY 2010 Appropriation Level	FY 2011 President's Budget	FY 2011 +/- FY 2010
TOTAL					
--BA	\$ -	\$ -	\$ -	\$ -	\$ -
--PHS Eval	\$ 97,092,000	\$ -	\$ 111,789,000	\$ 90,371,000	\$ (21,418,000)

Authorizing Legislation: Title III and IX and Section 937(c) of the Public Health Service Act
 FY 2009 Authorization.....Expired
 Allocation Method.....Competitive Grant/Cooperative Agreement, Contracts, and Other.

A. Program Description and Accomplishments

In addition to our research portfolios, funds are provided in HCQO to support a variety of research projects that support all of our research portfolios. Projects that support all portfolios are kept with the Crosscutting Activities Related to Quality, Effectiveness and Efficiency portfolio. In order to meet its outcome goals, AHRQ has developed a set of research contract and grant mechanisms that support the work of the portfolios. These activities include investigator-initiated research, data collection, measurement, dissemination and translation, program evaluation, grant review support, and other crosscutting contracts.

Examples of projects that help portfolios with data and measurement in health care include the Consumer Assessment of Healthcare Providers and Systems (CAHPS), Healthcare Cost and Utilization Project (HCUP), Quality Indicators (QIs), and the National Healthcare Disparities and Quality Reports (NHDR/QR). Additional information about these activities is found in the next section.

Creation of new knowledge is critical to AHRQ's ability to answer questions related to improving the quality of health care. Investigator-initiated research and training projects that have overarching research topics – not specific to one portfolio – are kept within Crosscutting Activities. In addition, research portfolios use other activities to ensure that their research is being disseminated to the appropriate health care stakeholder and translated to usable information so health care is directly improved. Examples of activities that help with dissemination and translation are the Eisenberg Center, Evidence-based Practice Centers (EPCs), marketing outreach activities, clearinghouses, and direct dissemination and knowledge transfer activities. Finally, crosscutting activities support rapid cycle research and include Accelerating Change and Transformation in Organizations and Networks (ACTION), Centers for Education & Research on Therapeutics (CERTs), Primary Care Practice-Based Research Networks (PBRNs), and Developing Evidence to Inform Decisions about Effectiveness (DeCIDE Network). These rapid cycle research activities are found both in Crosscutting Activities and within our research portfolios – depending on the topic.

Research and Training Grants

AHRQ supports two targeted grant programs within Crosscutting Activities: CAHPS and CERTs. Details about these two programs are provided below. In addition, AHRQ-supported grantees in

this portfolio are working to answer questions about: cost, organization and socio-economics; long-term care; pharmaceutical outcomes; training; quality of care; and system capacity and bioterrorism through our investigator-initiated grant program.

- **CAHPS®**. CAHPS is a multi-year initiative of AHRQ. Originally, “CAHPS” referred to AHRQ’s “Consumer Assessment of Health Plans Study.” However, in 2005, AHRQ changed this to “Consumer Assessment of Health Providers and Systems.” This name better reflects the evolution of CAHPS from its initial focus on enrollees’ experiences with health plans to a broader focus on consumer experience with health care providers and facilities. AHRQ first launched the program in October 1995 in response to concerns about the lack of reliable information about the quality of health plans from the enrollees’ perspective. The survey was adopted by the Centers for Medicare & Medicaid Services (CMS), U.S. Office of Personnel Management, and the National Committee for Quality Assurance for public reporting and accreditation purposes. As of 2007, 138,000,000 Americans were enrolled in health plans for which CAHPS data were collected. Over time, the program has expanded beyond its original focus on health plans to address a range of health care services and meet the various needs of health care consumers, purchasers, health plans, providers, and policymakers. In June 2007, AHRQ funded the third iteration of CAHPS grants to two organizations: RAND and the Yale School of Public Health. Though instrument development is a part of CAHPS 3, there is a heavier emphasis on using CAHPS data for quality improvement and expanding our knowledge of how to report quality data to consumers and other audiences. In FY 2010 and FY 2011, AHRQ support for CAHPS grants will total \$2.9 million. Here are some highlights of the past fiscal year:

- *TalkingQuality*. *TalkingQuality* is a Web site developed by the CAHPS consortium (AHRQ, the CAHPS grantees, and the CAHPS support contractor). This Web site assembles existing research and best practices about reporting quality information to consumers and other audiences. The intended users are people and organizations who design health care quality reports. In the past year, the team has begun a large-scale revision to this site, including updating of all information, designating priority content, improvements to site, including updating of all information, designating priority content and improvement to site. The production team has reviewed a beta-version of the improved website; we will launch it at the CAHPS/SOPS (Surveys of Patient Safety Culture) User Meeting in Baltimore in April 2010.
- *CAHPS Clinician and Group Survey*. This survey, which we released in spring 2007, asks patients about their recent experiences with physicians and other office staff. In response to user requests, the team developed two versions of this survey: a visit-specific version (where users focus on their last visit to a provider rather than care received during a longer time period) and a version with a different response option (4 to 6 point scale). We are also considering development of a 'hybrid' instrument, which would include some question from the visit-specific version along with some using the 4 to 6 point scale.

In 2009, the CAHPS team presented two webinars related to the Clinician and Group Survey. The first, held in June, provided an update on instrument design, implementation and comparative data. Two hundred ninety four people participated in this webinar; 56% rated it “very helpful,” 42% rated it “somewhat helpful.” The second, presented in September, concerned physician practice use of CAHPS C&G data for quality

improvement. Three hundred seventeen people participated in this webinar; 50% rated it “very helpful,” 36% rated it “somewhat helpful.”

The Washington DC-based Center for the Study of Services (CSS) used a slightly-modified version of Clinician/Group CAHPS to obtain assessment of physicians in three cities (Denver, Kansas City and Memphis). They then published these data on a website that was initially available only to physicians and is now available to patients (available at http://www.cssresearch.org/srv_svyPatPhy.cfm). This is the first large-scale test of collecting and presenting CAHPS data to users.

- *CAHPS Home Health Care Survey.* The National Quality Forum (NQF) endorsed the CAHPS Home Health Care Survey in 2009, making it a voluntary consensus standard for measuring the quality of care delivered by home health care agencies. The CAHPS Home Health Care Survey asks about the experiences of patients who receive at least some skilled home health care services, such as from nurses, physical, occupational, and speech-language therapists, and nurse aide care.

The Centers for Medicare & Medicaid Services (CMS) began inviting voluntary submission of CAHPS Home Health Care data in October, 2009. Agencies who want to receive their full market basket update need to participate in a ‘dry run’ of data submission for the first quarter of 2010 and to continue submitting data on a quarterly basis thereafter. CMS plans to begin publishing these data for use by consumers and others in January 2011.

- *CAHPS Health Plan Survey Online Database Reporting.* In September 2009, AHRQ posted this year’s CAHPS Health Plan Survey results in a new online reporting system (available at <http://www.cahps.ahrq.gov/CAHPSIDB/default.aspx>). This reporting system presents national summary-level results for the commercial, Medicaid, and Medicare sectors for the years 2009 and 2008. Users are able to select specific composites or questions to view and build their own reports. They are also able to construct their own version of the Health Plan Survey Chartbook. Also, Medicaid Survey users who contributed data are now able to access individual results through the secure, password-protected area of the online system, which enables them to view their own results compared to selected benchmarks.

The long-term goals of CAHPS are to ensure that: consumers/patients have accurate and timely information about health care providers and facilities to inform their selection decisions, and providers and health care facilities have accurate information from their patients to use as a basis for quality improvement efforts. CAHPS has set a program performance goal of ensuring that CAHPS data will be more easily available to the user community and the number of consumers who have accessed CAHPS information to make health care choices will increase by over 50 percent from the FY 2002 baseline of 100 million. By moving to create surveys for a range of providers beyond the widely used CAHPS health plan surveys, including clinicians, hospitals, nursing homes, and dialysis facilities, CAHPS is rapidly expanding the capacity to collect data that can be utilized to make more informed choices by the purchasers who contract with and the consumers who visit these providers.

- **CERTs.** The Centers for Education & Research on Therapeutics (CERTs) program is a 10

year old, national initiative to conduct research and provide education that advances the optimal use of therapeutics (i.e., drugs, medical devices, and biological products), improve patient health outcomes, and improve the quality of health care while reducing its costs. The program currently consists of 14 research centers and a Coordinating Center and is funded and run as a cooperative agreement research program by AHRQ in consultation with the U.S. Food and Drug Administration (FDA.) The CERTs receive funds from both public and private sources, with AHRQ providing core infrastructure financial support – \$11.5 million in both FY 2009 and FY 2010, with additional specific AHRQ Portfolio investments from Patient Safety and Health Information Technology. In FY 2011 the current CERTs grants end. The FY 2011 Request level will support new CERTs supported in other AHRQ portfolios, including Comparative Effectiveness and Patient Safety, for a total level of support of approximately \$7 million in FY 2011.

The clinical research conducted by the CERTs program addresses three major aims:

- To increase awareness of new, effective, and low-risk uses of new drugs and drug combinations, biological products, and devices, as well as of mechanisms (encompassing patient-, provider-, and systems-based interventions) 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 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 cross-cutting CERTs have a distinctive niche in therapeutics research of diverse and integrated activities that support multiple AHRQ portfolios at the same time. Individual and cross-cutting CERTs Centers' activities innovate, pilot, and thereby generate valuable new evidence to increase the effectiveness and safety of therapeutics use by patients, providers, and systems of care and payment.

- **For patients**, the CERTs identify and pilot actionable interventions (such as targeted prescribing, patient education or behavioral support) to optimize adherence, compliance, and the clinical and genetic heterogeneity of vulnerable subgroups and individuals
- **For providers**, the CERTs explore ways to fill knowledge and practice gaps in therapeutics use to **improve benefits of underutilized drugs** (such as beta-blockers after heart attacks), **avoid harms through judicious use of commonly prescribed drugs** (such as GI bleeding from warfarin overdosing or gastric insults from antiplatelet drugs or nonsteroidal anti-inflammatory drugs or NSAIDs), and **reduce errors** due to medication duplication or confusion from fractionated medical care (for example, by outpatient medication reconciliation done after new medications are introduced during hospitalization.)
- **For systems of care and payment**, the CERTs explore multiple factors, such health information technology or payment structures, that influence the appropriate use of therapeutics. Examples include medication ordering systems to encourage judicious use of powerful antibiotics or the influence of co-payments and step-therapy processes upon

chronic medication adherence or discontinuities in treatment.

The cross-cutting CERTs generate critical and applied information to support salutary changes in all aspects of the health care system. They focus on special populations with complex, multifactorial health care management issues, such as the elderly and children with chronic diseases. They develop, analyze, and apply findings from complex data infrastructures to support the needs of key constituencies, such as the safety concerns of the Food and Drug Administration and the quality of care concerns of Medicaid Medical Directors' regarding current practices in using highly expensive drugs with uncertain benefit/harm balances, such as tumor necrosis factor blockers or atypical antipsychotic medications.

Lastly, the cross-cutting CERTs conduct research and education to offer AHRQ and HHS a unique opportunity to foster innovative educational and behavioral supports to promote optimal therapeutics. Through their numerous partnerships with local and National organizations, the cross-cutting CERTs offer a rich network of players as well as means to promulgate evidence-based, high quality, effective, and safe health care through the use of therapeutics.

CERTS: Inappropriate Antibiotic Use in Children: Measure 4.4.1

Results show that from FY 2005 through FY 2008, the average number of antibiotic prescriptions for U.S. children ages 1-14 has fluctuated, with no statistically significant net change. In FY 2004, baseline rates were established (0.56 prescriptions per child). In FY 2008 the target was a 1.8% drop (0.53 prescriptions per child); the actual result was 0.58 prescriptions per child (95% CI: 0.53 – 0.62). In FY 2009, the target was a 1.8% drop (0.51 prescriptions per child), and the actual result was 0.55 prescriptions per child (95% CI: 0.49 – 0.60). The result for FY 2009 (0.55 prescriptions per child) does not show a statistically significant difference from the FY 2004 baseline estimate (0.56 prescriptions per child)

Notwithstanding annual fluctuations, the target has remained at a 1.8% drop each year. Continued examination of trends over time will assist in determining whether the targeted decline in use is realistic, achievable, and accurately reflects “appropriate” levels of prescribing. During FY 2009, the targeted number of prescriptions fell within the confidence interval of the measurement, although the point estimate was larger. This illustrates one aspect of this measure which deserves attention for future refinement, as identified during the course of an outside evaluation. The targeted changes can not be confidently measured at the annual level of precision that was established.

This goal includes children, a priority population for AHRQ. Reduction in antibiotic use by children is expected to reduce adverse reactions associated with medications and the cost of medical care. Reduced use may also lessen the rates of resistant organisms, an important public health problem. A two-pronged approach to reduced use is needed, through both the clinician and the caregiver.

Overall, at least four cross-cutting CERTs Research Centers are working to reduce inappropriate use of antibiotics. Broadly, their activities include microbial stewardship and efforts to minimize inappropriate antibiotic treatments for pediatric infections by accurate diagnoses and application of treatment guidelines from the Centers for Disease Control and the American Academy of Pediatrics. Products from work performed by the CERTs research centers include publications in peer-reviewed journals, as well as presentations at national

meetings of healthcare professional organizations. An example is work conducted by one of the research centers to evaluate an antimicrobial stewardship program (ASP) at a pediatric teaching hospital in Philadelphia. This project concluded that an ASP improves the appropriate use of antimicrobials medications in hospitalized children, and the results were published in the Pediatric Infectious Disease Journal in 2008 as well as presented at the Society of Healthcare Epidemiology of America (SHEA) in 2009. Another CERT research center wrote a commentary in 2009 in the Journal of the American Medical Association (JAMA) for clinicians on the use of more conservative prescribing practices. The publication specifically mentions the challenges in antibiotic prescribing and the risk of antimicrobial resistance. The ongoing dissemination of this information through participating professional organizations should assist the implementation of research findings to facilitate appropriate management and thus positively influence antibiotic utilization. Refinement of this measure in the coming year should lead to a proposal for a more clearly targeted performance measure that will reflect the goal of 4.4.1: reduce antibiotic inappropriate use in children between the ages of one and fourteen.

CERTs: Congestive Heart Failure Readmission Rates: Measure 4.4.2

Results show that from FY 2005 through FY 2007, the actual rates of readmission for congestive heart failure during the first six months in those between 65 and 85 years of age have trended consistently downward. In FY 2004, baselines rates were established (38% readmission rate). In FY 2006, the target was a 2.7% drop and the actual result was a 0.7% drop (36.74% readmission rate). In FY 2007, the target was a 1.4% drop and the actual result was a 0.6% drop (36.51% readmission rate). In FY 2008, the target was a 1.4% drop and the actual result was a 4.4% drop (34.89% readmission rate).

The most recent results from FY 2009 show a 1.7% increase in the readmission rate (to 35.48%) relative to 2008, where the FY 2009 target was a 1.4% drop. Because of the large absolute and relative decline in the CHF readmission rate in 2008 and the possibility of an anomaly in the data measurement for that year, we compared the 2009 readmission rate (35.48%) to the 2007 value (36.51%) and found a 2.9% decline over the 2 year period. This two-year rate of decline is consistent with two consecutive years of the 1.4% annual decline that was targeted for 2008 and 2009. An additional year of data and closer examination of the four large U.S. states that make up the annual measurement should assist in determining whether the measurement instrument should be revised to provide a more robust national measurement of CHF readmissions. The independent evaluation done in 2009 noted limitations in using 4 states to represent national trends, and also anticipated reimbursement and performance-based activities in coming years that might motivate further declines in the rate of hospital readmissions, although countervailing economic forces were noted. For example, the current economic recession may push readmissions upward due to decreased medication use and/or decreased contacts with the medical system for preventive or treatment measures. Monitoring and consideration of secular and clinical influences are planned as part of the annual examination of this target.

In FY 2008, efforts have continued to reduce the congestive heart failure hospital readmission rates in those between 65 and 85 years of age. One of the cross-cutting CERTs research centers is working in close coordination with national partners to improve and promote adoption of evidence based heart failure therapy. As part of these efforts, they are continuing their ongoing study to create a hybrid national surveillance system to monitor the safety and effectiveness of heart failure therapies using augmented American Heart Association's Get

with the Guidelines – Heart Failure (AHA GWTG-HF) database with longitudinal links to Medicare claims data. Also continuing are researchers' efforts to evaluate a personalized feedback, education and quality improvement system for improving heart failure care. This project, once complete and disseminated through peer-reviewed publications and close partnerships with participating National professional organizations, is likely to assist attainment of AHRQ performance measure 4.4.2: reduce congestive heart failure hospital readmission rates during the first six months in those between 65 and 85 years of age by implementing the research findings.

CERTs: Upper GI (Gastrointestinal) Bleeding: Measures 4.4.3 and 4.4.4:

Results show that from FY 2006 through FY 2008, the actual rate of hospitalizations for upper GI bleeding due to adverse effects of medication or inappropriate treatment of peptic ulcer disease in those between 65 and 85 years of age have consistently met or slightly exceeded the targets. In FY 2004, baseline rates were established (55/10,000). In FY 2007, the target was a 2-percent drop and the actual result was a 5.2-percent drop (51.56/10,000). In FY 2008, the target was a 1.8-percent drop and the actual result was a 3.5-percent drop (49.75/10,000).

The most recent results from FY 2009 also met the corresponding target. In FY 2009, the target was a 1.8-percent drop and the actual result was a 3-percent drop (48.25/10,000). Although FY 2007 and FY 2008 had approximately double the targeted decrease in hospitalizations for GI bleeding, we retained the previously modeled FY 2009 target of a 3-percent decrease. AHRQ does not advise revising this target in light of findings from an external evaluation that anticipate the likelihood of a population increase in the risk of GI bleeding due to multiple factors. These include: the aging of the U.S. population, anticipated decline in proton pump inhibitor use due to FDA advisories regarding their use with antiplatelet drugs such as clopidogrel, and the current economic recession which will likely lead to lessened medical contact and use of gastroprotective agents, and at the same time, likely increase population consumption of alcoholic products.

Results show that from FY 2006 through FY 2008, the number of admissions for GI bleeding have generated a per year drop in per capita charges for GI bleeding and our targets have consistently been met. In FY 2004, baseline rates were established (\$96.54 per capita). In FY 2007, the target was a 4% drop (\$92.68) and the actual result was a 4.9% drop (\$91.81 per capita). In FY 2008, the target was a 5% drop (\$91.71) and the actual result was a 9.8% drop (\$87.10 per capita).¹

The most recent results from FY 2009 met and exceeded the corresponding target. In FY 2009, the target was a 6% drop (\$90.75) and the actual result was a 13.2% drop (\$83.81 per capita). This per capita cost surpasses the absolute target for per capita costs (\$86.89) that was set for FY2012. Again, we do not know the reason(s) for the unexpected steep percentage drop in per capita costs in FY 2008 and FY2009, and cannot reliably predict that rate of decline will continue in the future. Given the extensive decline through FY2009, we believe that it is reasonable to retain the absolute target of \$89.78 per capita costs for FY 2010, We will reevaluate performance of this measure in 2011 to determine if the factors suggested by our outside evaluation will slow or reverse the rate of decline seen over the

¹ In the 2008 Citizen's Report, the percentage reduction from based was erroneously reported as 5.1%; the correct percentage reduction from baseline was 9.8%.

past several years. To reiterate, the recent economic downturn will likely inhibit people from using gastrointestinal protective agents due to the increasing number of unemployed workers who will be unable to afford prescription and over-the-counter proton pump inhibitors and H2 receptor blockers because of lost jobs, drug coverage, and decreased disposable income. Recessions typically increase population use of alcoholic beverages, which are known gastric irritants. Thus, we cannot predict that the historic or recent past performance achievements will continue.

In support of this measure and its improvement in 2009, at least 4 cross-cutting CERTs Centers are working on projects that either directly or indirectly influence the risk of GI bleeding. These include multiple efforts to optimize the use of the anticoagulant warfarin, including efforts to educate clinicians and patients about how to achieve stable warfarin blood levels and therapeutic action, and to improve its monitoring so that excessive anticoagulation is avoided. Multiple other efforts address improved use of gastric irritants, such as non-steroidal anti-inflammatory drugs (NSAIDs.) AHRQ has continued and expanded its efforts to educate the public about safely using blood thinner pills, especially the commonly used drug warfarin. AHRQ updated its previous educational offering on blood thinners and added a Spanish language version and a video. As we noted last year, thousands of consumers are prescribed the anti-clotting drug warfarin (Brand name: Coumadin®), which is a dangerous medication that requires close monitoring and can lead to uncontrolled bleeding, including GI Bleeding. *Blood Thinner Pills: Your Guide to Using Them Safely*, an updated 24-page booklet, explains how these pills can help prevent dangerous blood clots from forming and what to expect when taking these medicines. *Staying Active and Healthy with Blood Thinners*, a 10-minute video, features easy-to-understand explanations of how blood thinners work and why it's important to take them correctly. AHRQ is working to disseminate these patient education tools to consumers, hospitals and other providers. Information on these products, which are offered in both English and Spanish versions, is available at: <http://www.ahrq.gov/consumer/btpills.htm#videos#videos>

We anticipate this educational effort, along with numerous other activities of the cross-cutting CERTs, will help to reduce hospitalization for upper GI bleeding due to the adverse effects of medication or inappropriate treatment of peptic ulcer disease, in those between 65 and 85 years of age. The overall direction of AHRQ's performance measure 4.4.3 will, however, be influenced by economic and health care trends that may offset or overwhelm the salutary efforts of multiple cross-cutting CERTs.

CERTs, as part of the now obsolete Pharmaceutical Outcomes program, underwent a program assessment in 2004. The program received a Moderately Effective rating. The assessment cited research to be conducted by AHRQ's CERTS program to reduce antibiotic inappropriate use in children, congestive heart failure hospital readmission rates, and hospitalizations for upper gastrointestinal bleeding due to the adverse effects of medication or inappropriate treatment of peptic ulcer disease. As a result of the program assessment, the CERTs is taking actions to: (1) analyze trends to determine if targets for measures need to be adjusted; and (2) produce reports on best practices in observational methods research.

- **Investigator-initiated Research.** New investigator-initiated research and training grants are essential to health services research – they ensure that an adequate number of both new ideas and new investigators are created each year. It represents the Agency's investment for future advances upon which the applied research of the future will be built. Early AHRQ-

supported research by Dr. Lucian Leape and others at Harvard University demonstrated that "errors in care are prevalent and often preventable." This early research provided the basis for AHRQ's current patient safety initiatives. The topics addressed by unsolicited investigator-initiated research proposals reflect timely issues and ideas from the top health services researchers. Usually, researchers develop their investigator-initiated proposals in response to program announcements that broadly describe the Agency's areas of interest. Examples of successful investigator-initiated research grants funded in prior years include:

- A new study shows that many children who undergo tympanostomy tube insertion (surgery for otitis media or middle ear inflammation) do not meet the criteria for receiving ear tubes: they generally did not have recurrent ear infections with fluid in both ears for 3 or more months and had no hearing loss. Researchers reviewed the cases of 682 children who had ear tubes inserted surgically. According to expert panel criteria, just 7 percent (48 cases) of the surgeries were appropriate, and nearly 70 percent (475 cases) were inappropriate. When the clinical characteristics of the children were compared to 1994 national clinical guidelines, the authors found 7.5 percent of the tubes insertions met guideline criteria and nearly 93 percent did not. (See *"Overuse of typanostomy tubes in New York metropolitan area: Evidence from five hospital cohort,"* by Salomeh Keyhani, M.D., M.P.H., Lawrence C. Kleinman, M.D., M.P.H., Michael Rothschild, M.D., and others in the October 3, 2008, *British Medical Journal* 337, pp. a1607, available at <http://www.bmj.com>.)
- When patients who are at low risk for coronary artery disease present at the emergency department (ED) with chest pain, physicians often admit them to observation units (OU) for evaluation. Patients who complete their OU evaluation with a positive or indeterminate stress test are admitted to the hospital and often undergo cardiac catheterization with negative results (i.e., less than 50 percent stenosis, absence of three-vessel disease, and no percutaneous intervention completed) which, in turn, significantly increases costs. For patients who had positive or indeterminate stress tests and subsequent negative catheterizations, costs increased across the board. When compared with costs for patients with negative stress tests, these patients had increases in ED (\$520 vs. \$467) and OU (\$440 vs. \$307) costs, total costs (\$7,298 vs. \$1,562), and total charges (\$23,499 vs. \$6,973). (See *"Diagnostic uncertainty and costs associated with current emergency department evaluation of low risk chest pain,"* by Rahul K. Khare, M.D., F.A.C.E.P., Emilie S. Powell, M.D., M.B.A., Arjun K. Venkatesh, M.B.A., and D. Mark Courtney, M.D., F.A.C.E.P., in the September 2008 *Critical Pathways in Cardiology* 7, pp. 191-196.)
- A preliminary study shows promising results for a recently developed tool that may be useful for evaluating interventions to prevent poor surgical outcomes. The Surgical Apgar Score calculates a patient's blood loss, lowest heart rate, and lowest mean arterial pressure during an operation to identify patients at risk for major complications and/or death within 30 days after surgery. Researchers found that of 1,441 patients with Surgical Apgar Scores of 9 or 10 (best scores), 5 percent developed major complications within 30 days, including two deaths (0.1 percent). By comparison, among 128 patients with scores of 4 or less, 56.3 percent developed major complications and 25 (19.5 percent) died. Each of the three scores was a significant predictor of complications and death. (See *"Utility of the surgical Apgar score,"* by Scott E. Regenbogen, M.D., M.P.H., Jesse M. Ehrenfeld, M.D., Stuart R. Lipsitz, Sc.D., and others in the January 2009 *Archives of Surgery* 144(1), pp. 30-36).

Research Contracts and IAAs

Examples of types of research contracts and IAAs AHRQ has supported related to Crosscutting Activities includes the following:

Data Contracts: Data activities coordinate AHRQ data collection and analysis activities across the Agency. Projects include HCUP, the HIV Research Network, and a variety of small data collection and processing contracts.

- **HCUP.** Efforts to improve the quality, safety, effectiveness, and efficiency of health care and reduce disparities in the United States require detailed knowledge about how the health care delivery system works now and how different organizational and financial arrangements affect this performance. Improving health care requires easy access to detailed information and data on costs, access to health care, quality, and outcomes that can be used for research and policymaking at the national, State, and local levels. It also requires tools to measure and track progress in these areas. The Healthcare Cost and Utilization Project (HCUP) provides the necessary data through a long-standing partnership with State data organizations, hospital associations, and private data organizations. HCUP is a family of health care databases and related software tools and products that support the mission of AHRQ. HCUP includes the largest collection of all-payer, encounter-level data in the United States, beginning in 1988. It includes detailed information on 90 percent of all inpatient stays in the country – including information about the diagnosis, the procedures, the cost, and who paid for the care, as well as encrypted non-identifiable demographic information. For over 27 States, it also includes ambulatory surgery and emergency department data. Support for the HCUP contract totals \$4.1 million in FY 2010 and \$5.8 million in FY 2011.

Expand and Improve Data and Tools

The HCUP databases have been a powerful resource for the development of tools that can be applied to other similar databases by health services researchers and decisionmakers. The expanded data and tools can then be translated to inform decisionmaking and improve health care delivery. A major achievement in 2009 was the creation and release of the largest all-payer emergency department database in the United States. The first Nationwide Emergency Department Sample (NEDS) database was created to enable national analyses of emergency department (ED) utilization patterns and support public health professionals, administrators, policymakers, and clinicians in their decisionmaking regarding this critical source of care. The NEDS contains clinical and non-clinical information on patients, regardless of payer—including those covered by Medicare, Medicaid, private insurance, and the uninsured. The ED serves a dual role in the U.S. health care system infrastructure as a point of entry for approximately 50 percent of inpatient hospital admissions and as a setting for treat-and-release outpatient visits. The second NEDS will be available to the public by March 2010, and annually thereafter. Additionally, HCUP will produce two other nationwide databases, the Nationwide Inpatient Sample (NIS) and the Kids' Inpatient Database (KID) along with over 100 state-level databases in 2011. HCUP tools and software will also be created and updated in 2011 to help health services researchers and decision makers to use HCUP and other similar databases. For example, HCUPnet, a free, on-line query system is based on data from HCUP and provides quick and easy access to health statistics and information on hospital inpatient and emergency department utilization.

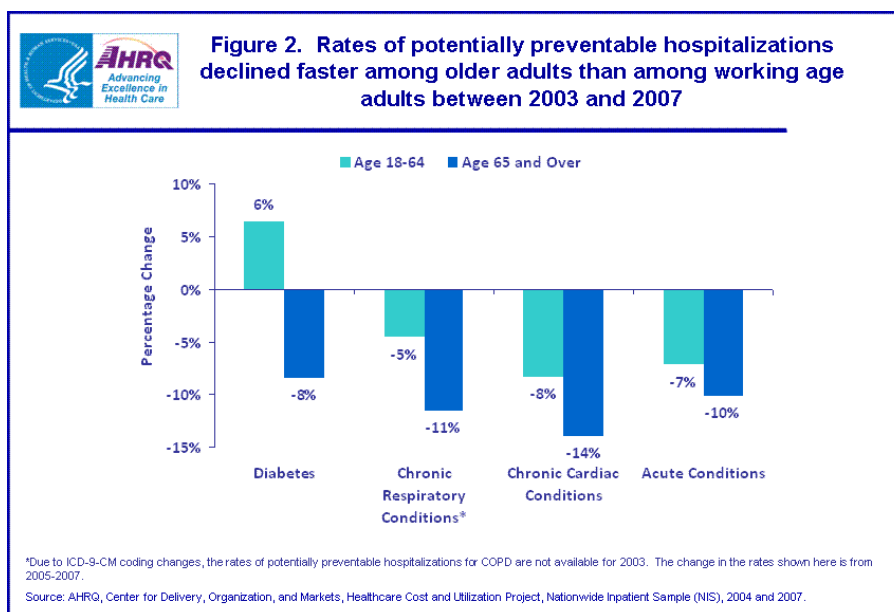
In FY 2009, AHRQ also met our performance target (see performance table #1.3.15) to increase the number of partners contributing outpatient data to the HCUP databases. AHRQ

added data from Wyoming for a total of 40 statewide data organizations participating in HCUP. The number of State Ambulatory Surgery Databases increased by one partner (Hawaii) and the number of State Emergency Department Databases increased by one partner (North Carolina). 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. This outcome met the goal by adding three new Partner databases. HCUP has matured to the point of having incorporated most of the available and viable data collections that met the long established goal criteria for the project. Because HCUP teams with organizations that already collect data for various purposes, the project is, of course, limited by the number of U.S. States with established inpatient and outpatient data collections. We set the FY 2011 goal to increase the number of partners providing data by 2.

HCUP provides critical information on the U.S. health care system such as:

- Inflation-adjusted aggregate costs for hospital stays rose from \$222.4 billion in 1997 to \$343.9 billion in 2007 — an increase of 55 percent.
- The most important driver of cost increases was greater intensity of services provided during the hospital stay. Costs per discharge increased by 3.1 percent annually.
- The fastest increase in costs was for infectious and parasitic diseases, more than doubling between 1997 (\$6.6 billion) and 2007 (\$15.3 billion). Septicemia (blood infection) was responsible for almost all (94 percent) of the increase in costs of infectious and parasitic conditions as it tripled in costs from \$4.1 billion in 1997 to \$12.3 billion in 2007.
- Between 1997 and 2007, the number of uninsured discharges grew by 38 percent and the number Medicaid discharges grew by 36 percent—more than double the rate of growth of all discharges (14 percent). The number of Medicare discharges grew by 14 percent while stays billed to private insurance grew by just 2 percent.
- In 2007, costs for Medicare stays amounted to \$156.0 billion and Medicaid stays accounted for \$50.4 billion—accounting for about 60 percent of total hospital costs. Discharges billed to private insurance accounted for 31 percent (\$107.8 billion), while the uninsured accounted for a much smaller share (5 percent, or \$16.5 billion).
- C-section was the most frequent major operating room procedure—performed on 1.5 million women in 2007. Growth in C-sections, up 85 percent between 1997 and 2007, outpaced increases in most other frequently performed maternal procedures and was among the fastest growing procedures for women 18-44 years old.
- Diagnostic cardiac catheterization was performed on 890,000 males and 581,000 females in 2007 and ranked as the 2nd most frequent procedure in men and the 4th most frequent procedure in women.
- Blood transfusions occurred in one out of every 10 hospital stays that included a procedure. There were 1.1 million stays with this procedure in 1997 and 2.6 million in 2007, for a cumulative growth of 140 percent.
- From 1997 to 2007:
 - Respiratory intubation rose steadily, increasing 48 percent.
 - Knee replacement increased by 86 percent.
 - Hemodialysis procedures for renal failure grew by 66 percent.
 - The use of tube feeding during infant hospitalizations increased 219 percent, compared with a 16-percent growth in all infant discharges.

HCUP also produces Statistical Briefs which are a series of Web-based publications containing information from HCUP. These publications provide concise, easy-to-read information on hospital care, costs, quality, utilization, access, and trends for all payers (including Medicare, Medicaid, private insurance, and the uninsured). Each Statistical Brief covers an important health care issue. For example, in nine of eleven categories of potentially preventable hospitalizations, hospitalization rates declined more rapidly or rose less rapidly for older adults than for younger adults between 2005 and 2007, following the implementation of Medicare Part D to cover drug costs.



Citation: Stranges, E., Friedman, B. *Trends in Potentially Preventable Hospitalization Rates Declined for Older Adults, 2003–2007*. HCUP Statistical Brief #83. December 2009. Agency for Healthcare Research and Quality, Rockville, MD. <http://www.hcup-us.ahrq.gov/reports/statbriefs/sb83.pdf>.

- The HIV Research Network (HIVRN).** The HIVRN is a network of HIV providers who pool data and collaborate on research to provide policymakers and investigators with timely information about the access to and cost, quality, and safety of, HIV care; and to share information and best practices in the Network. The Network is sponsored by: AHRQ, the Substance Abuse and Mental Health Services Administration (SAMHSA), the Health Resources and Services Administration (HRSA), the Office of AIDS Research at the National Institutes of Health (NIH), and the Office of the Assistant Secretary for Planning and Evaluation. AHRQ’s funding for this activity is \$1,413,000 in FY 2010. No funding is provided for FY 2011.

Measurement Contracts: Crosscutting activities support measurement activities. These activities include support for the National Healthcare Quality Report, the National Healthcare Disparities Report, Quality Indicators (QIs) and the contract component of the CAHPS grants activities.

- Support of the Development and release of the annual *National Healthcare Quality Report* and its companion document, the *National Healthcare Disparities Report*.** These reports measure quality and disparities in four key areas of health care: effectiveness,

patient safety, timeliness, and patient centeredness. In addition, AHRQ provides a *State Snapshots* Web tool that was launched in 2005 (available at <http://statesnapshots.ahrq.gov/snap08/index.jsp>). It is an application that helps State health leaders, researchers, consumers, and others understand the status of health care quality in individual States, including each State's strengths and weaknesses. The 51 State Snapshots—every State plus Washington, DC—are based on 129 quality measures, each of which evaluates a different segment of health care performance. While the measures are the products of complex statistical formulas, they are expressed on the website as simple, five-color “performance meter” illustrations. Support for these contracts and IAAs totals \$2.9 million in both FY 2010.

- **Quality Indicators (QIs).** One widely used HCUP tool is the AHRQ Quality Indicators (QIs) - a set of quality measures developed from HCUP data. Support for QIs total \$0.4 million in both FY 2010 and 2011. This measure set is organized into four modules—Prevention, Inpatient, Patient Safety, and Pediatrics. The Prevention Quality Indicators (PQIs) focus on ambulatory care sensitive conditions that identify adult hospital admissions that evidence suggests could have been avoided, at least in part, through high-quality outpatient care. Inpatient Quality Indicators (IQIs) reflect quality of care for adults inside hospitals and include: Inpatient mortality for medical conditions; inpatient mortality for surgical procedures; utilization of procedures for which there are questions of overuse, underuse, or misuse; and volume of procedures for which there is evidence that a higher volume of procedures may be associated with lower mortality. Patient Safety Indicators (PSIs) also reflect quality of care for adults inside hospitals, but focus on potentially avoidable complications and iatrogenic events. Pediatric Quality Indicators (PDIs) reflect quality of care for children below the age of 18 and neonates inside hospitals and identify potentially avoidable hospitalizations among children. These measures are free and made publicly available as part of an AHRQ supported software package. Please see <http://www.qualityindicators.ahrq.gov/>.

The AHRQ QIs are based upon a few guiding principles which make them unique. They:

- Were developed using readily available administrative data (HCUP);
- Use a transparent methodology;
- Are risk adjusted and use a readily available, familiar methodology;
- Are constantly refined based on user input;
- Are updated and maintained by a trusted source; and
- Have documentation and program software in the public domain.

The HCUP/QI family of data and products supports the achievements of a number of AHRQ objectives including two major goals:

- Expand and improve data and tools
- Expand use of HCUP and the AHRQ Quality Indicators (QIs) by policymakers and others

Expand Use of HCUP and the AHRQ Quality Indicators by Policymakers and Others

The AHRQ QIs are widely used for quality improvement and public reporting initiatives. We saw several major successes in FY 2009 most notably the addition of 4 states now doing hospital level public reporting of the AHRQ Quality Indicators and the CMS adoption of the AHRQ QIs in its 2009 IPPS Rule.

AHRQ has fully met its 2009 performance target (see performance table 1.3.22): “3 new

organizations use HCUP/QIs to assess potential areas of quality improvement, and at least 2 of them will develop and implement an intervention based on the QIs. Impact will be observed in 1 new organization after the development and implementation of an intervention based on the QIs.”

As the result of NQF endorsement in FY 2008, a growing number of States are using the Quality Indicators for public reporting of hospital quality. In FY 2009, New Jersey, California, Nevada and Oklahoma became the 13th, 14th, 15th and 16th states to use the AHRQ Quality Indicators in a hospital level public report card. With these new states reporting using the AHRQ QIs, AHRQ exceeded its 2009 performance target (see performance table 1.3.22). The state of Maryland used the Prevention Quality Indicators to measure potential cost savings in Maryland and identified interventions tied to reducing admissions for CHF, Diabetes, UTI, Dehydration and Bacterial Pneumonia. In addition, NYU Medical Center noted a high rate of Postop DVT/PE in 2006. They implemented a training program for coders, with targeted feedback about coding errors, which increased coding accuracy from 71% in 2006 to 100% in the 2nd and 3rd quarters of 2009. They also implemented departmental standards for VTE prophylaxis (including risk assessment, documentation of contraindications to prophylaxis, and condition/procedure-specific recommendations) and required CPOE order sets. A new Quality Indicators Learning Institute assisted states interested in using the AHRQ QIs to use the indicators effectively, and provided technical assistance to new States or communities as they plan their public reporting efforts. Through this initiative, AHRQ has become aware of additional states that are in the planning stages of hospital level public reporting in FY 2010. Also in FY09, AHRQ began a new initiative focused on developing a toolkit for hospitals that would identify best practices and interventions for addressing quality problems highlighted by the AHRQ QIs. In FY 2010, development, testing and implementation of a draft hospital level toolkit will occur. The final toolkit will be publicly available in FY 2011.

As mentioned above, the Center for Medicare & Medicaid Services (CMS) incorporated nine AHRQ Patient Safety Indicators in its 2009 IPPS Rule (acute hospital inpatient prospective payment system). CMS has held a national “dry run” of the measures with its hospitals and is planning on releasing the measures by hospital on its Hospital Compare Web site in FY 2010. It is anticipated that as CMS incorporates the AHRQ QIs into its reporting and payment programs, a large number of new hospitals, hospital systems and other organizations will be using the AHRQ QIs. In early FY 2010, the state of Illinois went live with its web-based publicly report using the AHRQ QIs. By the end of 2010, it is likely that AHRQ will exceed its original performance target. In FY 2011, AHRQ will continue to support the AHRQ Quality Indicators and facilitate its use by new organizations, including the full implementation of the AHRQ QIs in the CMS 2009 IPPS Rule. The CMS 2010 IPPS Rule identified additional AHRQ Quality Indicators that CMS may report on Hospital Compare. These additional measures would be tested and/or implemented on Hospital Compare in FY 2011.

- **Survey Users Network (SUN).** The SUN assists in development and dissemination of CAHPS® products. The SUN contract coordinates the work of the CAHPS® consortium; prepares CAHPS® products for dissemination to potential users in electronic and hardcopy format; delivers a range of technical assistance to users; provides technical and logistical support for conferences and meetings; and operates the National CAHPS® Benchmarking Database (NCBD). Support for this contract is \$1.6 million in FY 2010.

Dissemination and Translation Contracts: AHRQ supports a variety of contracts for projects that disseminate AHRQ products, tools, and research to target groups and provide assistance in implementing them. Examples of activities in this category include the following:

- **Contracts to support the National Quality Measures Clearinghouse (NQMC) and its companion the National Guideline Clearinghouse (NGC).** The NQMC and the NGC provide open access to thousands of quality measures and clinical practice guidelines to clinicians and health care providers. The NQMC and NGC receive close to 2 million visits each month. They can be found at <http://www.qualitymeasures.ahrq.gov> and <http://www.guideline.gov>. Support for these two clearinghouses total \$7.0 million in FY 2010.
- **Knowledge Transfer and Applications Support and Exhibit Logistics Support.** These contracts develop and implement integrated knowledge transfer and application strategies using a wide range of innovative methods that will increase the rates of application and use of research findings in health care policy and practice by AHRQ stakeholders. These stakeholders include health and hospital system decision makers, State and local policymakers, health care purchasers, and providers. Support for these contracts total \$4.25 million in FY 2010.
- **AHRQ Publications Clearinghouse.** This contract operates a Publications Clearinghouse for the storage and distribution of AHRQ publications (available at http://ahrqpubs.ahrq.gov/OA_HTML/ibeCZzpHome.jsp); maintains and manages AHRQ's automated mailing/inventory control system; and manages the storage and shipping of AHRQ exhibits. Support for this contract totals \$1.9 million in FY 2010.
- **Electronic Dissemination Program.** The Web Management Team is staffed by onsite contractors, with the exception of the Web Manager and the Intranet Coordinator who are AHRQ staff. The Team provides support to numerous public Web sites sponsored by AHRQ, extranets with business partners, the Intranet, and several portal initiatives of the Department where AHRQ is a partner. Support for this contract totals \$1.9 million in FY 2010.

Data Management. AHRQ supports a variety of contracts that assist AHRQ in managing data. Examples of activities in this category AHRQ Applications Development and Maintenance support. This work allows AHRQ to support agency system and application requirements and to quickly adopt and implement both department and agency technology standards. The contractor provides support in the following areas; process improvement, business analysis, systems analysis, system design, software development, application operations and maintenance, testing and deployment of complex technologies into the existing IT environment. Additional general IT support is provided to support agency system and application requirements and to quickly adopt and implement both department and agency technology standards. Assistance is also provided in the areas of: technology evaluation and feasibility studies, process re-engineering, business analysis, systems analysis, system design, enterprise architecture, IT Security and CIO support

to include business risk assessments, electronic commerce and E-Government, and support of legislative and OMB and Departmental directives. Overall data management support is provided at \$5.3 million in both FYs 2010 and 2011.

Grant Review Support. This contract provides technical, analytic, and logistical support services to the Office of Extramural Research, Education, and Priority Populations (OEREP) in furtherance of its mission to oversee AHRQ's initial review processes; to facilitate ethics review procedures and education for intramural research; and to facilitate general OEREP communication and analytic responsibilities. Support for this contract is provided at \$1.9 million in FYs 2010 and 2011.

IAAs with Federal Government. An Inter-agency Agreement (IAA) is an agreement between AHRQ and other Federal Agencies. Crosscutting Activities provides support for IAAs and requisitions that provide overall direction and support to all portfolios. The level of IAA support varies by fiscal year, but ARHQ estimates \$7.8 million for FY 2010.

Evaluation Activities. AHRQ's Planning, Evaluation, and Analysis Task Order Contract (PEATOC) and Other Agency Evaluation activities provide a mechanism to facilitate the production of focused, high-priority planning, evaluation, and other types of quantitative and qualitative analytical products for all portfolios and crosscutting issues within the Agency. Support for this contract totals \$2.15 million in FYs 2010.

B. Funding History

Funding for the Crosscutting Activities Related to Quality, Effectiveness, and Efficiency Research program during the last five years has been as follows (following comparability adjustments to reflect the centralization of all staff and administrative overhead costs within Program Support):

<u>Year</u>	<u>Dollars</u>
2006	\$ 96,968,000
2007	\$ 91,611,000
2008	\$ 94,420,000
2009	\$ 97,092,000
2010	\$111,789,000

C. Budget Request

The FY 2011 Request level provides \$90,371,000 for Crosscutting Activities Related to Quality, Effectiveness, and Efficiency research, a decrease of \$21,418,000 from the FY 2010 Appropriation. The funding is described by activity below:

Crosscutting Activities Related to Quality, Effectiveness, and Efficiency (in millions of dollars)

	FY 2009 Enacted	FY 2010 Appropriation	FY 2011 Request
GRANTS:			
Centers for Education and Research on Therapeutics (CERTs) – RFA	\$11.477	\$11.463	\$0.000
Consumer Assessment of Healthcare Providers and	2.929	2.921	2.921

	FY 2009 Enacted	FY 2010 Appropriation	FY 2011 Request
System (CAHPS) III – RFA			
Investigator-initiated Grants	25.268	40.360	37.290
Subtotal, Grants	\$39.674	\$54.744	\$40.211
CONTRACTS:			
Data, Including HCUP	9.099	9.099	9.386
Measurement	4.900	4.900	3.955
Dissemination and Translation	18.287	18.287	15.387
Data Management	5.330	5.330	5.330
Grant Review Support	1.918	1.918	1.918
IAAs with Various Federal Agencies	7.848	7.848	7.000
Evaluation Activities	2.150	2.150	0.000
Other Contracts and Requisitions	7.886	7.513	7.184
Subtotal, Contracts	\$57.418	\$57.045	\$50.160
Total, Crosscutting Activities	97.092	111.789	90.371

Research and Training Grants:

The FY 2011 Request level includes \$40,211,000 in total research grants for HCQO: Crosscutting Activities Related to Quality, Effectiveness and Efficiency. This is a decrease of \$14,138,000 from the FY 2010 Enacted. All of the grants in FY 2011 are continuing research and training grants, since the CERTs grants end in FY 2011. The FY 2011 Request level for grants includes the following:

- **Investigator-initiated Research.** The FY 2011 Request provides \$37,290,000 for investigator-initiated research, a decrease of \$3,070,000 from the FY 2010 Enacted. At the FY 2011 Request level, all of the research grants funded within Crosscutting Activities are non-competing grants. The FY 2011 Request does not include any funds for new investigator-initiated research grants. Investigator-initiated research, used by organizations like the National Breast Cancer Coalition, corporations, and other Federal agencies, forms the backbone of AHRQ's ability to improve health care with creative and innovative approaches to ongoing and emerging care issues. This research is conducted by new investigators with fresh ideas, as well as by investigators who are leaders in their respective fields. The experienced researchers are uniquely qualified to identify gaps in existing medical research and the needs of clinical practice.
- **CERTs.** In FY 2010 all of the CERTs grants within the Crosscutting Activities portfolio will end. The FY 2011 Request does not re-invest these funds into new CERTs grants within this portfolio, a decrease of \$11,463,000 from the FY 2010 Appropriation. Six new CERTs that are directly relevant to AHRQ's priorities for the Effective Health Care Program will be funded in FY 2011 in the Patient-Centered Health Research portfolio and one new pediatric patient safety CERT will be funded in the Patient Safety portfolio for an overall level of support of approximately \$7 million. However, those CERTs focused on cross-cutting areas will be eliminated as will the 4 pharmaceutical outcomes measures (on antibiotics use, congestive heart failure readmissions, and decreased GI bleeding hospitalizations and costs).
- **CAHPS®.** The FY 2011 Estimate will provide non-competing research grant support for the CAHPS program. Funding for CAHPS grants will total \$2.9 million in FY 2011. In FY 2010,

the CAHPS program will ensure that data will be more easily available to the user community and the number of consumers who have access to CAHPS information to make health choices will increase by 46 percent over baseline (see performance table 1.3.23). If AHRQ meets this target for FY 2010, 146 million consumers will have access to CAHPS information, and for FY 2011 the target is projected to be 148 million consumers. In addition, work on the following projects will continue in 2011:

- Testing how consumers perceive and use health quality information via a constructed website called “Select MD.” This website, prepared by the CAHPS Reports Team, includes clinical, patient experience and anecdotal information about selected physicians. Once we receive approval from OMB we will begin collecting data. These data will help us prepare quality reports that consumers are more likely to read and use.
- Maintaining and responding to users queries regarding all the existing CAHPS instruments. This includes organizations such as CMS which uses HCAHPS data for HospitalCompare.
- Supporting organizations who are using CAHPS data for quality improvement.

Research Contracts and IAAs:

The FY 2011 Request level provides \$50,160,000 for research contracts and IAAs, a decrease of \$6,885,000 from the FY 2010 Appropriation of \$57,045,000. This level of support will allow AHRQ to continue core research contracts and IAAs that support Crosscutting Activities Related to Quality, Effectiveness and Efficiency research and will provide for the following:

- **Data Contracts:** The FY 2011 Request for Data is \$9,386,000, an increase of \$287,000. This increase is comprised of the following:
 - The FY 2011 Request for HCUP provides an increase of \$1.7 million in contract funds over the FY 2010 Enacted level for a total level of support of \$5.8 million for this project. The increase will allow HCUP to maintain data capacity given rising database prices and to purchase more databases, obtain additional data, expand to new care settings, increase the timeliness of the data, support the enhancement of data, and strengthen the distribution of data.

HCUP and the QIs (funded at \$400,000 in FY 2011 in the Measurement category) have set an effectiveness goal that by 2010, at least five organizations will use HCUP databases, products or tools to improve health care quality for their constituencies by 5 percent, as defined by AHRQ Quality Indicators. Of those, three new organizations use HCUP/QIs to assess potential areas of quality improvement, and at least two of them will develop and implement an intervention based on the QIs. Impact will be observed in one new organization after the development and implementation of an intervention based on the QIs. The target for 2011 is an additional five organizations. By increasing the number of organizations using HCUP and the Quality Indicator tools, we support the overall program goal.

HCUP’s long-term goal for efficiency is to achieve wider access to effective health care services and reduce health care costs by increasing the number of partners contributing data to the HCUP databases. Expanding to add new States and increasing the number of

Partners that contribute ambulatory surgery and emergency department data improves national and regional representation. In FY 2009, AHRQ added data from Wyoming for a total of 40 statewide data organizations participating in HCUP. The number of State Ambulatory Surgery Databases (AS) and the number of State Emergency Department Databases (ED) each increased by one partner (Hawaii and North Carolina). Progress has already been made toward FY 2010 goals with the addition of a 41st partner. 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 FY 2011 goal is to increase the number of partners providing data by 2.

- The HIV Research Network (HIVRN) will not be funded by AHRQ in FY 2011, providing a decrease of \$1,413,000. The goal of the HIV Research Network (HIVRN) is to obtain, analyze, and disseminate current information on the delivery of services to people with HIV infection. Treatment of HIV infection is complex. The HIVRN was designed to disseminate this information widely, using the most recent available data and to share information about best practices.
- **Measurement Contracts:** The FY 2011 Request for Measurement is \$3,900,000, a decrease of \$945,000 from the FY 2010 Appropriation. The decrease comes from a reduction in the number of data measures for the National Healthcare Quality and Disparities Reports. At the Request level AHRQ will only report on a core set of minimal data measures. In addition, AHRQ will eliminate the Online Data Query System which allows users to electronically access data from both the NHDR and NHQR, as well as the State Snapshots site which allows for State-specific health care quality information and comparisons. The FY 2011 Request will allow for continued support of AHRQ's Quality Indicators (QIs). The QIs are a set of quality measures developed from HCUP measures. Finally, the FY 2011 Request will also continue support of the Survey Users Network (SUN). The SUN assists in the dissemination, translation and technical assistance of CAHPS products.
- **Dissemination and Translation:** The FY 2011 Request for Dissemination and Translation is \$15,387,000, a decrease of \$2,900,000 from the FY 2010 Appropriation. These contracts support projects that disseminate AHRQ products, tools and research to target groups and provide technical assistance in the implementation of AHRQ tools. At the FY 2011 Request level we will eliminate some contracts related to knowledge transfer and applications support, exhibit logistics support, the AHRQ publication clearinghouse, and other dissemination and translation efforts.
- **Data Management:** The FY 2011 Request for Data Management is \$5,330,000, the same level of support as the FY 2010 Appropriation. These contracts assist AHRQ in managing data. In FY 2011 AHRQ will continue to support in the following areas; process improvement, business analysis, systems analysis, system design, software development, application operations and maintenance, testing and deployment of complex technologies into the existing IT environment. Work will also be completed in the areas of: technology evaluation and feasibility studies, process re-engineering, business analysis, systems analysis, system design, enterprise architecture, IT Security and CIO support to include business risk assessments, electronic commerce and E-Government, and support of legislative and OMB and Departmental directives.

- **Grant Review Support:** The FY 2011 Request for Grant Review support is \$1,918,000, the same level as the FY 2010 Appropriation. This contract assists AHRQ's Office of Extramural Research, Education, and Priority Populations (OEREP) regarding the technical, analytic, and logistical support service. In FY 2011, work will take place in overseeing grant review processes, facilitating ethics reviews and development of processes and procedures, education, and logistical support.
- **IAAs with Federal Government:** The FY 2011 Request includes \$7,000,000 in support for Inter-agency Agreements with other Federal Agencies, a decrease of \$848,000 from the FY 2010. The IAAs AHRQ does fund will continue to support the Agency's mission and all research portfolios.
- **Evaluation Activities:** The FY 2011 Request eliminates evaluation contracts for Crosscutting Activities, a decrease of \$2,150,000 from the FY 2010 level. AHRQ developed a Planning, Evaluation, and Analysis Task Order Contract (PEATOC) to provide a mechanism to facilitate the production of focused, high-priority planning, evaluation, and other types of quantitative and qualitative analytical products for all portfolios and crosscutting issues within the Agency.
- **Other Contracts and Requisitions:** The FY 2011 Request provides \$7,184,000 for other contracts and requisitions, a decrease of \$329,000 from the FY 2010 level. AHRQ will continue to fund contracts and requisitions that support the Agency mission. AHRQ will reduce support for small contracts, including the support for AHRQ events like the AHRQ Annual meeting.

IT Expenditures within the Crosscutting Activities Portfolio

The budget for Crosscutting Activities Related to Quality, Effectiveness and Efficiency Research funds a variety of research projects impacting all of the portfolios. Investigator initiated research and training projects that have over-arching research topics – not specific to one portfolio – are represented in this “Crosscutting” portfolio. Some examples of the research contracts include but are not limited to the National Quality Measure Clearinghouse (NQMC) and Healthcare Cost Utilization Project (HCUP).

The above mentioned research contracts are a few examples of program investments with complementing IT activities. These activities are driven by and support the business and measurement required for the agency to be successful in creating data repositories and, then, translating and disseminating the research results to appropriate parties.

D. Outputs and Outcomes Tables

Program: Crosscutting Activities Related to Quality, Effectiveness and Efficiency Research

Performance Trends by Program:

CERTs: With the exception of the antibiotic prescription measure (for which external evaluators have suggested important refinements to discern appropriate antibiotic prescribing), all CERTs performance measures were met or exceeded.

CAHPS: In FY 2007, CAHPS met the performance target (see performance measure 1.3.23) to increase 40 percent over the baseline of the user community. In FY 2007 AHRQ increased this usage to 41 percent over the baseline of 100 million users – 141 million users of CAHPS information – and maintained this performance level in 2008. In FY 2008, the program did not meet its target of increasing the number of using 42 percent over the baseline. This is due to the

fact that no new major organization adopted the CAHPS tool and therefore, no increase in usage was noted. In FY 2009, the program proposed a 44% increase over the baseline. We did not meet this goal because a) ABMS (American Board of Medical Specialties) has moved more slowly than we anticipated in use of the Clinician/Group CAHPS Survey as part of their accreditation process and b) CMS did not begin using the Home Health Care Survey in the beginning of 2009 as they had projected. For FY 2010 and 2011, the program proposes increases of 46% and 48% respectively. Given the fact that CMS is now collecting Home Health Care data, we feel that the FY 2010 goal is likely to be met. Our ability to meet the 2011 goal (and goals beyond that year) will depend on how many organizations implement the Surveys for PCMH, Cancer CAHPS and Surgical CAHPS. Given that there is a requirement for CMS to obtain CAHPS Health Plan data for CHIPRA reporting, we expect to see increased use of this survey by state Medicaid programs in 2011 and 2012.

HCUP: Over the past 5 years, the cumulative number of partners contributing data to HCUP databases have been steadily increasing resulting in a more robust and representative data resource. Since 2005, we have added 22 unique inpatient, ambulatory surgery or emergency department databases to HCUP. Successfully efforts are already underway to bring the remaining state databases into HCUP by 2011.

QIs: Over the past 5 years, the number of new organizations using the AHRQ Quality Indicators has steadily increased. In 2005, there were 3 state organizations that publicly reported the AHRQ Quality Indicators at the hospital level. In 2009, that number rose to 16 state organizations.

Please see AHRQ's On-Line Performance Appendix (available at <http://www.ahrq.gov/about/cj2011/cj11opa.htm>) for measures the portfolio will be retiring in FY 2011.

Measure	Most Recent Result	FY 2010 Target	FY 2011 Target	FY 2011 +/- FY 2010
4.4.1: The number of prescriptions of antibiotics per child aged 1 to 14 in the U.S. <i>(Outcome)</i>	FY 2009: 0.55 per child (Target Met – Result falls within measurement error)	0.51	0.50	-.01
4.4.2: The percentage of hospital readmissions within 6 months for congestive heart failure in patients between 65 and 85 years of age <i>(Outcome)</i>	FY 2009: 34.89% (Target Met)	34%	33.5%	-.5%
4.4.3: The decrease in the rate of hospitalization for upper gastrointestinal bleeding due to the adverse effects of medication or inappropriate treatment of peptic ulcer disease in patients between 65 and 85 years of age.	FY 2009: 3.0% drop (Target Met)	-1.8% drop	-1.8% drop	0

Measure	Most Recent Result	FY 2010 Target	FY 2011 Target	FY 2011 +/- FY 2010
<i>(Outcome)</i>				
4.4.4: The cost per capita of hospital admissions for upper gastro-intestinal bleeding among patients aged 65 to 84. <i>(Outcome)</i>	FY 2009: \$83.81 (Target Exceeded)	\$89.78 (7% drop)	\$88.82 (8% drop)	(-\$0.96) (1% drop)
1.3.15: Cumulative number of partners contributing data to HCUP databases will exceed by 5% the FY 2000 baseline of 39 <i>(Output)</i>	FY 2009: 28 Ambulatory Surgery (AS) 27 Emergency Departments (Target Met)	Increase the number of partners providing data	Increase the number of partners providing data	NA
1.3.22: Number of additional organizations per year that use Healthcare Cost and Utilization Project (HCUP) databases, products, or tools in health care quality improvement efforts. <i>(Output)</i>	FY 2009: 4 organizations (Target Exceeded)	3 organizations	5 organizations	+2 organizations
1.3.23: The number of consumers who have access to customer satisfaction data from the Consumer Assessment of Healthcare Providers and Systems (CAHPS) to make health care choices. <i>(Outcome)</i>	FY 2009: 141 Million (Target Not Met)	146 Million	148 Million	+2 Million
Crosscutting Activities (Dollars in Millions)		\$111.789	\$90.371	-\$21.418

E. Mechanism Table for Crosscutting Activities

AGENCY FOR HEALTHCARE RESEARCH AND QUALITY
Crosscutting Mechanism Table
(Dollars in Thousands)

	FY 2009 Actual		FY 2010 Appropriation		FY 2011 Request	
	<u>No.</u>	<u>Dollars</u>	<u>No.</u>	<u>Dollars</u>	<u>No.</u>	<u>Dollars</u>
RESEARCH GRANTS						
Non-Competing.....	89	24,174	97	31,148	100	40,211
New & Competing.....	95	15,500	125	23,596	0	0
Supplemental.....		<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
TOTAL, RESEARCH GRANTS.....	184	39,674	222	54,744	100	40,211
TOTAL CONTRACTS/IAAs.....		57,418		57,045		50,160
TOTAL.....		97,092		111,789		90,371

Medical Expenditure Panel Survey (MEPS)

	FY 2009 Enacted	FY 2009 Recovery Act	FY 2010 Appropriation Level	FY 2011 President's Budget	FY 2011 +/- FY 2010
TOTAL					
--BA	\$ -	\$ -	\$ -	\$ -	\$ -
--PHS Eval	\$ 55,300,000	\$ -	\$ 58,800,000	\$ 59,300,000	\$ 500,000

Authorizing Legislation: Title III and IX and Section 937(c) of the Public Health Service Act
 FY 2009 Authorization.....Expired
 Allocation Method..... Contracts, and Other.

A. Program Description and Accomplishments

The Medical Expenditure Panel Survey (MEPS), first funded in 1995, 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, microdata files and research reports/journal articles.

The MEPS is designed to provide annual estimates at the national level of the health care utilization, expenditures, sources of payment and health insurance coverage for the U.S. civilian non-institutionalized population. The MEPS consists of a family of interrelated surveys, which include a Household Component (HC), a Medical Provider Component (MPC), and an Insurance Component. In addition to collecting data to yield annual estimates for a variety of measures related to health care use and expenditures, MEPS provides estimates of measures related to health status, demographic characteristics, employment, access to health care and health care quality. Estimates can be provided for individuals, families and population subgroups of interest. The data collected in this ongoing longitudinal study also permit studies of the determinants of the use of services and expenditures, and changes in the provision of health care in relation to social and demographic factors such as employment or income; the health status and satisfaction with health care of individuals and families; and the health needs of specific population groups such as the elderly and children.

The data from the MEPS have become a linchpin for the public and private economic models projecting 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 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.

Because of the need for timely data, performance goals for MEPS have focused on providing data in a timely manner. The MEPS program has met or exceeded all of its data timeliness goals. These performance goals require the release of the MEPS Insurance Component tables within 6 months of data collection; the release of MEPS Use and Demographic Files within 11 months of data collection; the release of MEPS Full Year Expenditure data within 11 months of data collection. In addition, the program has expanded the depth and breadth of data products available to serve a wide range of users. To date, over 275 statistical briefs have been published. The MEPS data table series has expanded to include eight topic areas on the household component and nine topic areas on the Insurance Component. In addition, specific large State and metro area expenditure and coverage estimates have been produced, further increasing the utility of MEPS within the existing program costs.

Further advances in the timeliness of the MEPS Insurance Component data have been initiated through a change in the questionnaire to obtain employer sponsored coverage information that is in force at the time of data collection, rather than for a prior year retrospective reference period. Due to such changes in the Insurance Component survey design and processing, the calendar year 2008 estimates of employer-based health insurance costs and availability are now provided a full year earlier than in previous years. In FY 2009, this timely advance in the provision of national and state level health insurance premium estimates served to improve the accuracy of the cost implications associated with health initiatives. In addition, advances in data accessibility have also been achieved by expanding the number of Data Centers across the Nation to permit access to MEPS restricted data through collaboration with the Bureau of the Census to utilize nine additional Research Data Centers for approved projects. Since its inception in 1996, MEPS has been used in several hundred scientific publications, and many more unpublished reports to inform health policy decisions and practice.

- MEPS data on national and state estimates of the percentage of employees enrolled in high cost health insurance plans were used by the Senate Finance Committee to develop their legislation.
- MEPS data produced detailed estimates of children eligible for S-CHIP who were uninsured. The information provided on number of children who were eligible for such coverage but remained uninsured had a significant impact on the Reauthorization of the Child Health Insurance Program (CHIP).
- MEPS data on national estimates of gaps and trends in health insurance coverage over two year period was used by Secretary Sebelius in a speech on Insurance Insecurity and the related HHS Report.
- The MEPS data have been used extensively by the Congressional Budget Office, Congressional Research Service, Department of Treasury, Joint Taxation Committee, and Department of Labor to inform Congressional inquiries related to health care expenditures, insurance coverage and sources of payment and to analyze potential tax and other implications of Federal Health Insurance Policies.

- MEPS data on health care quality, access, and health insurance coverage have been used extensively in the Department's two annual reports to Congress, the National Healthcare Disparities Report and the National Healthcare Quality Report.
- The MEPS was awarded the American Association for Public Opinion Research's 2008 Policy Impact Award in recognition of their extraordinary, long-term group effort in contributing timely data and research that has informed U.S. health care policy decisions.
- The MEPS has been used in Congressional testimony on the impact of health insurance coverage rate increases on small businesses.
- The MEPS data have informed studies of the value of health insurance in private markets and the effect of consumer payment on health care.
- The MEPS data have been extensively used to inform Congressional inquiries tied to State Children's Health Insurance Program (SCHIP) reauthorization, with particular emphasis on the change in take-up rates among Medicaid eligible children over the implementation period of SCHIP and the percent of all uninsured children who are eligible for Medicaid or SCHIP.
- The MEPS -IC has been used by a number of States in evaluating their own private insurance issues including eligibility and enrollment by the State of Connecticut and by the Maryland Health Care Commission; and community rating by the State of New York. As part of the Robert Wood Johnson Foundation's State Coverage Initiative, MEPS data was cited in 69 reports, representing 27 States.
- The MEPS data have been used extensively by the Government Accountability Office to determine trends in Employee Compensation, with a major focus on the percentage of employees at establishments that offer health insurance, the percentage of eligible employees who enroll in the health insurance plans, the average annual premium for employer-provided health insurance for single workers, and the employees' share of these premiums.
- MEPS data have been used in HHS Reports to Congress on expenditures by sources of payment for individuals afflicted by conditions that include acute respiratory distress syndrome, arthritis, cancer, chronic obstructive pulmonary disease, depression, diabetes, and heart disease.
- MEPS data are used to develop estimates provided in the *Consumers Checkbook Guide to Health Plans*, of expected out of pocket costs (premiums, deductibles and copayments) for Federal employees and retirees for their health care. *The Checkbook* is an annual publication that provides comparative information on the health insurance choices offered to Federal workers and retirees.
- The MEPS has been used to estimate the impact of the Medicare Modernization Act (MMA) by the Employee Benefit Research Institute (the effect of the MMA on availability of retiree coverage), by the Iowa Rural Policy Institute (effect of the MMA on rural elderly) and by researchers to examine levels of spending and co-payments.

- MEPS data have been used by CDC and others to evaluate the cost of common conditions including arthritis, injuries, diabetes, obesity and cancer.

Before AHRQ reorganized research portfolios in 2007, MEPS was part of the Data Collection and Dissemination portfolio. This portfolio underwent a program assessment in 2002, and was found to be moderately effective. The review cited the Medical Expenditure Panel Survey (MEPS) as a strong attribute of the program. As a result of the program assessment, the program continues to take actions to reduce the number of months that MEPS data is made available after the date of completion of the survey, increase the number of MEPS data users, and increase the number of topical areas tables included in the MEPS Tables Compendia.

B. Funding History

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

<u>Year</u>	<u>Dollars</u>
2006	\$55,300,000
2007	\$55,300,000
2008	\$55,300,000
2009	\$55,300,000
2010	\$58,800,000

C. Budget Request

The FY 2011 Request level for the MEPS totals \$59,300,000 in contracts and IAAs, which reflects an increase of \$500,000 above the FY 2010 Appropriated level. The funding allocation in FY 2011 for the three core MEPS Component Surveys is provided below.

Survey Component	FY 2009 Enacted	FY 2010 Appropriation	FY 2011 OMB Request
MEPS Household Component	\$33,300,000	\$36,800,000	\$37,100,000
MEPS Medical Provider Component	\$12,000,000	\$12,000,000	\$12,200,000
MEPS Insurance Component	\$10,000,000	\$10,000,000	\$10,000,000
TOTAL, MEPS	\$55,300,000	\$58,800,000	\$59,300,000

Prior to FY 2010, the MEPS budget received no funding increments for most of the decade while survey administration and data processing costs were rising. To meet these budget constraints over the past decade, the MEPS Household Component sample size had declined by approximately 10%, impacting the precision of survey estimates and analytic capacity. The FY 2011 Request for MEPS will be used to support 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 restored in 2011 to 14,500 households with full calendar year information. These sample size specifications for the MEPS permit detailed analyses of the health care expenditures, health insurance coverage, and the quality of care received by special populations meeting precision specifications for 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.

The MEPS Household Component:

The FY 2011 Request will permit the continuation of an oversample in MEPS of Asian and Pacific Islanders, an over-sample of African Americans, and an oversample of Hispanics. 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 MEPS Insurance Component:

The MEPS Insurance Component (IC) is a survey of private business establishments and governments designed to obtain information on health insurance availability and coverage derived from employers in the U.S. The sample for this survey is selected from the Census Bureau's Business Register for private employers and Census of Governments for public employers. The IC is an annual survey designed to provide both nationally and state representative data on the types of health insurance plans offered by employers, enrollment in plans by employees, the amounts paid by both employers and employees for those plans, and the characteristics of the employers.

Funds will also be allocated to the MEPS Insurance Component to improve the availability of data at both the national and the State level. The FY 2010 Appropriation level allowed for data on employer sponsored health insurance to be collected in order to support both national and separate estimates for all 50 States and the District of Columbia. The FY2011 Request will maintain this capacity and these funds would also be used to enhance the tabulations provided to the States to support their analysis of private, employer sponsored health insurance. This will include data tabulations of distributional estimates of premiums paid for employer sponsored coverage at the State level.

The Medical Provider Component:

The FY 2011 Request will support the MEPS Medical Provider Component, a survey of medical providers, facilities and pharmacies that collects detailed data on the expenditures and sources of payment for the medical services provided to individuals sampled for the MEPS. The MEPS Medical Provider Component sample size of office based physicians is restored in 2011, increasing the MEPS provider sub-sample of person-provider pairs to original specifications that obtain data for 20,000 person-provider pairs, to insure the accuracy of MEPS survey expenditure estimates. Such data are essential to improve the accuracy of the national medical expenditure estimates derived from the MEPS and to correct for the item non-response on expenditures by household sample participants.

Recent enhancements to the estimation capabilities of the MEPS Household Component have also been realized and permit the generation of health care utilization, expenditure, and health insurance coverage estimates for some large metropolitan areas and for the ten largest States. This has resulted in visible improvements in the analytic capacity of the survey without any additional increments to the sample size.

IT Expenditures within the MEPS Portfolio: MEPS is the primary national source of annual and longitudinal data on how Americans use and pay for medical care. The survey collects

detailed information from families on access, use, expense, insurance coverage and quality. It supports all of AHRQ's research related strategic goal areas. This data is vital to the public and private economic models projecting health care expenditures and utilization. The IT portion of this portfolio is a key to the success of data collection, synthesis and dissemination. Recent upgrades to the system allow AHRQ to provide more timely data – a crucial factor for the success of this program.

The Medical Provider Component is also having its data system revamped. This component is adapting existing software and components to collect information from hospitals, pharmacies and other medical providers. This conversion will facilitate the automation of a number of quality control procedures and reduce a step in data collection (copying information onto paper forms which were then entered into a database). As medical providers adopt electronic medical and billing practices, this will process assist in reducing their survey burden in the future. This modification will also result in an enhancement to survey efficiency.

Performance Targets

In terms of performance targets, measures 1.3.16 in FY 2011, and measure 1.3.17 in FY 2010 cannot be more ambitious than the prior year. The MEPS program recently re-engineered its interviewing system. At the same time, our sample design changed as a result of the new sample design of the National Health Interview Survey. Because of these changes, additional quality control measures are needed to insure the integrity of survey estimates. Once this process is stable, we will evaluate whether continued efficiencies are possible, and what resources would be required to attain them.

D. Outputs and Outcomes Tables

Program: Medical Expenditure Panel Survey (MEPS)

Long-Term Objective: Achieve a wider access to effective health care services and reduce health care costs.

Performance Trends: The MEPS Program has met or exceeded all program assessment data timeliness goals. In addition, due to modifications to the MEPS Insurance Component survey design and data processing, calendar year estimates of employer-based health insurance costs and availability were provided a full year earlier than in previous years.

Please see AHRQ's On-Line Performance Appendix (available at <http://www.ahrq.gov/about/cj2011/cj11opa.htm>) for measures the portfolio will be retiring in FY 2011.

Measure	Most Recent Result	FY 2010 Target	FY 2011 Target	FY 2011 +/- FY 2010
1.3.16: Insurance Component tables will be available within months of collection (<i>Output</i>)	FY 2009: 6 months (Target Met)	6 months	6 months	0.0
1.3.17: MEPS Use and Demographic Files will be available months after final data collection (<i>Output</i>)	FY 2009: 11 months (Target Met)	11	10.5	-0.5

Measure	Most Recent Result	FY 2010 Target	FY 2011 Target	FY 2011 +/- FY 2010
1.3.18: Number of months after the date of completion of the Medical Expenditure Panel Survey data will be available (<i>Output</i>)	FY 2009: 11 months (Target Met)	10.8 months	10.5	-0.3
1.3.19: Increase the number of topical areas tables included in the MEPS Tables Compendia (<i>Output</i>)	FY 2009: Update State Level Estimates (Target Met)	Add additional variables to MEPS net	Add additional tables to MEPS-HC TC	NA
1.3.20: Increase the number of MEPS Data Users Baseline FY 2005: 10 DCP 15,900 TC 13,101 HC/IC (<i>Outcome</i>)	FY 2009: 41 DCP (Target Met)	Exceed baseline standard	Exceed baseline standard	Maintain
1.3.21: The number of months required to produce MEPS data files (i.e. point-in-time, utilization and expenditure files) for public dissemination following data collection. (<i>Outcome</i>)	FY 2009: 11 months (Target Met)	10.8 months	10.6 months	-0.2
1.3.49: The average number of field staff hours required to collect data per respondent household for the MEPS (at level funding). (<i>Efficiency</i>)	FY 2009: 13.0 (Target Met)	12.8	12.7	-0.1
MEPS (Dollars in Millions)		\$58.800	\$59.300	+\$0.500

E. Mechanism Table for MEPS

AGENCY FOR HEALTHCARE RESEARCH AND QUALITY
MEPS Mechanism Table
(Dollars in Thousands)

	FY 2009 Actual		FY 2010 Appropriation		FY 2011 Request	
	No.	Dollars	No.	Dollars	No.	Dollars
RESEARCH GRANTS						
Non-Competing.....	0	0	0	0	0	0
New & Competing.....	0	0	0	0	0	0
Supplemental.....	0	0	0	0	0	0
TOTAL, RESEARCH GRANTS.....	0	0	0	0	0	0
TOTAL CONTRACTS/IAAs.....		55,300		58,800		59,300
TOTAL.....		55,300		58,800		59,300

Program Support

	FY 2009 Enacted	FY 2009 Recovery Act	FY 2010 Appropriation Level	FY 2011 President's Budget	FY 2011 +/- FY 2010
TOTAL					
--BA	\$ -	\$ -	\$ -	\$ -	\$ -
--PHS Eval	\$ 65,122,000	\$ -	\$ 67,600,000	\$ 72,713,000	\$ 5,113,000
FTEs	289	0	300	315	15

Authorizing Legislation: Title III and IX and Section 937(c) of the Public Health Service Act
FY 2009 Authorization.....Expired
Allocation Method.....Other.

A. Program Description and Accomplishments

This budget activity supports the strategic direction and overall management of the AHRQ, including funds for salary and benefits of 315 FTEs.

Program Support

Program support activities for the agency include operational support costs such as salaries and benefits, rent, supplies, travel, transportation, communications, printing and other reproduction costs, contractual services, taps and assessments, supplies, equipment, and furniture. Most AHRQ staff divide their time between multiple portfolios, which is why AHRQ's staff and overhead costs are shown centralized in Program Support, instead of within the relevant research portfolio or MEPS. Formerly, the majority of these costs were shown within HQCO's Crosscutting Activities portfolio.

Strategic Direction

Strategic Management of Human Capital

AHRQ participated in the Federal Human Capital Survey (FHCS) and is assessing the impact of the results at the Office/Center levels and communicating this information to staff. Additionally, Agency staff involved in the Making AHRQ Great Initiative (MAG) has been called upon to foster solutions and ensure issues on a large scale are resolved (e.g., themes which cut across AHRQ). An action plan is currently being developed which will address issues and concerns that were revealed through the survey.

Recently, AHRQ conducted forums to assess the current Performance Management Appraisal Program system (PMAP) and provided responses to the Department suggesting changes to the existing policy. In an effort to ensure full and open conversations, forums and questionnaires were utilized to obtain feedback from managers and employees. Notable suggestions included weighting of the performance elements and implementation of a five tiered appraisal system. AHRQ recently engaged in testing of the new automated performance management application and conducted a pilot test with a small group of staff in the Agency. AHRQ continues to support workforce development programs and initiatives through competency assessment, development and implementation for mission critical activities. The Agency identified a need for, and implemented mandatory Project Management training for all AHRQ staff and participated in the Department-wide effort to identify and establish core competencies across OPDIVs/StaffDIVs. Finally, AHRQ continues to strive towards meeting the OPM 45-day timeline for hiring and notifying applicants to SES and non-SES vacancies. We are working in collaboration with the Rockville Human Resources Center to ensure timelines are met and we consistently inform selecting officials of this requirement through the issuance of action due dates upon release of certificates identifying eligible applicants.

In response to the Department's workforce and succession planning initiative, AHRQ began working on several analyses and reports to gain a better understanding of the Agency's workforce needs and required skill sets. As part of this Initiative, the Agency's Senior Leadership Team were polled about their current and anticipated workforce needs. Additionally, an analysis was completed on the Agency's senior positions to determine potential competency loss due to upcoming retirements or departures in programmatic and management positions and the state of succession planning activities in order to mitigate or greatly reduce a disruption to AHRQ programs and services. Results of these two separate activities were incorporated into the Agency's succession plan and presented to Departmental officials in August, 2009.

Improve Financial Performance

AHRQ is working to demonstrate to the Office of Finance at HHS effective use of financial information to drive results in key areas of operations and to develop and implement a plan to continuously expand the scope to additional areas of operations. AHRQ has completed the review and updating of all internal controls in light of the transition to an integrated, department-wide financial management solution – the Unified Financial Management System (UFMS). In addition, AHRQ continued to participate in the Department's A-123 internal control efforts and implemented all corrective actions for deficiencies reported as a result of the FMFIA/A-123 internal control processes identified in FY 2009. In FY 2010, AHRQ will update all internal controls based on the transition to the HHS Consolidated Acquisition Solution (HCAS). HCAS is the standardized acquisition system that will be used across multiple OPDIVs, including AHRQ. Finally, AHRQ continues to maintain a low-risk status for improper payments.

Electronic Government

AHRQ's current activities include:

- Ongoing development of policies and procedures that link AHRQ's IT initiatives directly to the mission and performance goals of the Agency. Our governance structure ensures that all IT initiatives are not undertaken without the consent and approval of AHRQ Senior Management and prioritized based upon the strategic goals and research priorities of the agency.
- Ensuring AHRQ's IT initiatives are aligned with departmental and agency enterprise architectures. Utilizing HHS defined FHA and HHS Enterprise Architectures, AHRQ ensures that all internal and contracted application initiatives are consistent with the technologies and standards and adopted by HHS as well as OMB directives. This uniformity improves application integration (leveraging of existing systems) as well as reducing cost and development time.
- Providing quality customer service and operations support to AHRQ's centers, offices and outside stakeholders. This objective entails providing uniform tools, methods, processes, practices and standards to ensure all projects and programs are effectively managed utilizing industry best practices. These practices include PMI (PMBOK, EVM), RUP (SDLC), CPIC, and EA. These practices have appreciably improved AHRQ's ability to satisfy project objectives to include cost and schedule.
- Ensuring the protection of AHRQ data; commensurate with current and future legislation and OMB directives. AHRQ's security program goals focus on executing the defined goals developed in our strategic and tactical plans which are targeted at three key areas: People, Process and Technology. These goals include but are not limited to: implementation of LOB Information and Security and Privacy Awareness training, System Development Life Cycle and FIPS 140-2 compliant encryption solutions. AHRQ continues to ensure 98 percent or higher of AHRQ's employees will complete the LOB Information Security and Privacy Awareness training. AHRQ will continue to follow the modified systems development life-cycle to ensure that security is addressed throughout each project phase. The Agency will deploy encryption solutions for mobile devices, removable media, and data and will ensure FDCC settings are applied to all desktops, laptops, and ensure servers are deployed with departmental approved standard security settings.

Please note: AHRQ's FY 2011 OMB Circular A-11, Exhibit 300: Capital Asset Plan and Business Case Summaries can be found at <http://it.usaspending.gov/>.

Performance Improvement

General program direction is accomplished through the collaboration of the Office of the Director and the offices and centers that have programmatic responsibility for portions of the Agency's research portfolio. AHRQ created a framework to provide a more thoughtful and strategic alignment of its activities. This framework represents the Agency's collaborative efforts on strategic opportunities for growth and synergy. As the result of increased emphasis on strategic planning, the Agency continues the shift from a focus on output and process measurement to a focus on outcome measures where feasible. These outcome measures cascade down from our strategic goal areas of safety/quality, effectiveness, efficiency and organizational excellence. Portfolios of work (combinations of activities that make up the bulk of our investments) support the achievement of our highest-level outcomes.

Performance data will be tracked electronically using the Agency's electronic performance tracking system and published as soon as it becomes available. Also, work will continue with program staff to establish and display a close alignment of projects and how they support AHRQ's performance measures and the Department's strategic goal areas. All of AHRQ's

performance measures are displayed in AHRQ's On-Line Performance Appendix (available at <http://www.ahrq.gov/about/budgtix.htm>).

In FY 2008 and FY 2009, AHRQ continued the implementation of strong budget and performance integration practices through the use of structured Project Management processes. AHRQ has begun a campaign to design and implement a quality improvement process for managing major programs that support the Agency's strategic goals and Departmental strategic goals and specific objectives.

AHRQ has successfully completed comprehensive program assessments on six key programs within the Agency: The Medical Expenditure Panel Survey (MEPS); the Healthcare Cost and Utilization Project (HCUP); the Consumer Assessment of Healthcare Plans Survey (CAHPS®); the Patient Safety portfolio; the former Pharmaceutical Outcomes portfolio; and most recently the Health Information Technology portfolio. These reviews provide the basis for the Agency to move forward in more closely linking high quality outcomes with associated costs of programs. Over the next few years, the Agency will focus on fully integrating financial management of these programs with their performance.

B. Funding History

Funding for the Program Support budget activity during the last five years is provided below. Please note these total have been made comparable to reflect the centralizing of all staff and administrative overhead costs within this budget activity.

<u>Year</u>	<u>Dollars</u>
2006	\$56,940,000
2007	\$59,542,000
2008	\$62,380,000
2009	\$65,122,000
2010	\$67,600,000

C. Budget Request

The FY 2011 Request level for Program Support is \$72,713,000, an increase \$5,113,000 over the FY 2010 Appropriated level. The FY 2011 Request level provides \$2,250,000 to support salary and benefit costs for 15 new FTEs for the Patient-centered Health Research portfolio. A total of \$1,600,000 for pay raise costs for AHRQ as a whole, and \$500,000 for required increases within AHRQ's budget, including rent increases, travel, printing, and data costs is provided at the FY 2011 Request. The FY 2011 Request also includes \$763,000 to support increased costs for the Service and Supply Fund as well as Joint Funding Agreements with other operating divisions within HHS. A table showing estimated Program Support costs by portfolio and MEPS is provided below.

Program Support Costs by Portfolio
(in millions of dollars)

	FY 2009 Enacted	FY 2010 Appropriation	FY 2011 Request
Patient-centered Health Research	10,420	4,056	13,524
Prevention/Care Management	1,302	3,380	3,523
Value Research	651	676	705
Health Information Technology	9,768	5,408	7,046
Patient Safety	10,420	18,252	14,797
Crosscutting Activities	20,839	23,660	19,730
Medical Expenditure Panel Survey	11,722	12,168	13,388
Total, Research Management	65,122	67,600	72,713

In FY 2011, AHRQ will provide salary support to:

- Continue to develop internal IT program management policies and procedures in line with guidance being issued by HHS.
- Implement a Federal Information Processing Standard (FIPS) Publication 140-2 compliant email encryption solution.
- Comply with HHS Enterprise Architecture requirements for FY 2011.
- Develop and update Risk Assessment of HCQO and continue to participate in the Department's A-123 internal control efforts.

D. Outputs and Outcomes Tables

Program: Program Support

Long-Term Objective: Improve performance in all areas of Program Support.

Please see AHRQ's On-Line Performance Appendix (available at <http://www.ahrq.gov/about/cj2011/cj11opa.htm>) for measures the portfolio will be retiring in FY 2011.

Measure	Most Recent Result	FY 2010 Target	FY 2011 Target	FY 2011 +/- FY 2010
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Measure	Most Recent Result	FY 2010 Target	FY 2011 Target	FY 2011 +/- FY 2010
<p><u>5.1.1:</u> Improve AHRQ's strategic management of human capital (<i>Output</i>)</p>	<p>FY 2009: Complied with all Departmental procedures for HR management. Completed report on workforce needs and required skill sets. (Target Met)</p>	<p>Fully comply with all Departmental procedures for HR management</p>	<p>Upon Departmental approval, fully implement the new HHS-wide automated performance management system</p>	<p>NA</p>
<p><u>5.1.2:</u> Maintain a low risk improper payment risk status (<i>Output</i>)</p>	<p>FY 2009: Met all requirements for Department's A-123 Internal Control efforts (Target Met)</p>	<p>Complete updating of all internal controls following AHRQ's conversion to HCAS</p>	<p>Develop Risk Assessment and continue to participate in the Department's A-123 Internal Control efforts</p>	<p>NA</p>
<p><u>5.1.3:</u> Expand E-government by increasing IT Organizational Capability (<i>Output</i>)</p>	<p>FY 2009: Developed internal IT program management policies and procedures in line with guidance being issued by HHS (Target Met)</p>	<p>Continue to develop internal IT program management policies and procedures in line with guidance being issued by HHS</p>	<p>Continue to develop internal IT program management policies and procedures in line with guidance being issued by HHS</p>	<p>NA</p>

Measure	Most Recent Result	FY 2010 Target	FY 2011 Target	FY 2011 +/- FY 2010
<u>5.1.4:</u> Improve IT Security/Privacy Output (<i>Output</i>)	FY 2009: Integrated and aligned AHRQ's security program with HHS's Secure one security program (Target Met)	Fully implement FDCC and standard security configurations of all systems	Implement a FIPS 140-2 compliant email encryption solution	NA
<u>5.1.5:</u> Establish IT Enterprise Architecture (<i>Output</i>)	FY 2009: Complied with EA activity set forth by HHS. (Target Met)	Comply with HHS EA requirements for FY 2010	Comply with HHS EA requirements for FY 2011	NA
<u>5.1.6:</u> Meet all performance goals related to performance and budget integration (<i>Output</i>)	FY 2009: VPS implemented within the portfolios Began development of WBS for all projects (Target Met)	Comply with HHS performance and budget integration requirements for FY 2010	Comply with HHS performance and budget integration requirements for FY 2011	NA
Program Support (Dollars in Millions)		\$67.600	\$72.713	+\$5.113

Supplementary Tables

Supplementary Tables

Budget Authority by Object Class	112
Salaries and Expenses Table	113
Detail of Full-Time Equivalent Employment (FTE) Change	114
Detail of Positions	115
FY 2011 Enterprise Information Technology and Government-wide E-Gov Initiatives.....	116

Budget Authority by Object Class 1/

	<u>2010 Estimate</u>	<u>2011 Estimate</u>	<u>Increase or Decrease</u>
<u>Personnel compensation:</u>			
Full-time permanent (11.1).....	25,292,000	27,882,000	+2,590,000
Other than full-time permanent (11.3).....	7,502,000	7,769,000	+267,000
Other personnel compensation (11.5).....	1,050,000	1,087,000	+37,000
Military Personnel (11.7).....	1,635,000	1,692,000	+57,000
Subtotal personnel compensation.....	35,479,000	38,430,000	+2,951,000
Civilian Personnel Benefits (12.1).....	8,394,000	9,255,000	+861,000
Military Personnel Benefits (12.2).....	982,000	1,017,000	+35,000
Benefits to Former Personnel (13.0).....	54,000	56,000	+2,000
Total Pay Costs.....	44,909,000	48,758,000	+3,849,000
Travel and transportation of persons (21.0).....	581,000	589,000	+8,000
Rental payments to GSA (23.1).....	4,254,000	4,312,000	+58,000
Communications, utilities, & misc charges (23.3)...	758,000	768,000	+10,000
Printing and reproduction (24.0).....	1,407,000	1,423,000	+16,000
<u>Other Contractual Services:</u>			
Other services (25.2).....	13,308,000	14,447,000	+1,139,000
Purchases of goods & services from government accounts (25.3).....	17,800,000	17,000,000	-800,000
Research and Development Contracts (25.5).....	184,576,000	322,684,000	+138,108,000
Operation and maintenance of equipment (25.7)...	669,000	678,000	+9,000
Subtotal Other Contractual Services.....	216,353,000	354,809,000	+138,456,000
Supplies and materials (26.0).....	312,000	316,000	+4,000
Equipment (31.0).....	1,402,000	1,422,000	+20,000
Grants, subsidies, and contributions (41.0).....	127,077,000	198,515,000	+71,438,000
Total Non-Pay Costs.....	352,144,000	562,154,000	+210,010,000
Total obligations by object class.....	397,053,000	610,912,000	+213,859,000

1/ Annual Appropriation only. This table excludes other reimbursable estimates that are included in the Budget Appendix.

Salary and Expenses

AGENCY FOR HEALTHCARE RESEARCH AND QUALITY			
Salaries and Expenses ^{1/} _{2/}			
Total Appropriation			
Object Class	FY 2010 Estimate	FY 2011 Estimate	Increase or Decrease
Personnel compensation:			
Full-time permanent (11.1).....	\$25,292,000	\$27,882,000	+\$2,590,000
Other than full-time permanent (11.3).....	\$7,502,000	\$7,769,000	+\$267,000
Other personnel compensation (11.5).....	\$1,050,000	\$1,087,000	+\$37,000
Military Personnel (11.7).....	\$1,635,000	\$1,692,000	+\$57,000
Civilian Personnel Benefits (12.1).....	\$8,394,000	\$9,255,000	+\$861,000
Military Personnel Benefits (12.2).....	\$982,000	\$1,017,000	+\$35,000
Benefits to Former Employees (13.1).....	\$54,000	\$56,000	+\$2,000
Subtotal Pay Costs	\$44,909,000	\$48,758,000	+\$3,849,000
Travel (21.0).....	\$581,000	\$589,000	+\$8,000
Transportation of Things (22.0).....	\$0	\$0	\$0
Rental payments to others (23.2).....	\$0	\$0	-\$0
Communications, utilities, and miscellaneous charges (23.3).....	\$758,000	\$768,000	+\$10,000
Printing and reproduction.....	\$1,407,000	\$1,423,000	+\$16,000
Other Contractual Services:			
Other services (25.2).....	\$13,308,000	\$14,447,000	+\$1,139,000
Operations and maintenance of equipment (25.7).....	\$669,000	\$678,000	+\$9,000
Subtotal Other Contractual Services	\$13,977,000	\$15,125,000	+\$1,148,000
Supplies and materials (26.0).....	\$312,000	\$316,000	+\$4,000
Subtotal Non-Pay Costs	\$17,035,000	\$18,221,000	+\$1,186,000
Total Salaries and Expenses.....	\$61,944,000	\$66,979,000	+\$5,035,000

1/ Annual Appropriation only. This table excludes other reimbursable estimates that are included in the Budget Appendix.

2/ Excludes Rent and Equipment.

Detail of Full-Time Equivalent Employment (FTEs)

Detail of Full-Time Equivalent Employment (FTE)

	2009	2009	2009	2010	2010	2010	2011	2011	2011
	Est. Civilian	Est. Military	Est. Total	Est. Civilian	Est. Military	Est. Total	Est. Civilian	Est. Military	Est. Total
Office of the Director (OD).....	20	0	20	20	0	20	20	0	20
Office of Performance Accountability, Resources and Technology (OPART).....	52	0	52	54	0	54	54	0	54
Office of Extramural Research, Education, and Priority Populations (OEREPP).....	30	3	33	30	3	33	30	3	33
Center for Primary Care, Prevention, and Clinical Partnerships (CP3).....	23	3	26	24	3	27	24	3	27
Center for Outcomes and Evidence (COE).....	27	6	33	29	6	35	44	6	50
Center for Delivery, Organization and Markets (CDOM).....	24	0	24	25	0	25	25	0	25
Center for Financing, Access, and Cost Trends (CFACT).....	45	0	45	47	0	47	47	0	47
Center for Quality Improvement and Patient Safety (CQUIPS).....	18	2	20	21	2	23	21	2	23
Office of Communications and Knowledge Transfer (OCKT).....	36	0	36	36	0	36	36	0	36
AHRQ FTE Total.....	275	14	289	286	14	300	301	14	315
Recovery Act FTE.....	0	0	0	38	0	38	0	0	0
	275	14	289	324	14	338	301	14	315

Average GS Grade

2006	12.6
2007	12.6
2008	12.8
2009	12.8
2010	12.7

Detail of Positions 1/

AGENCY FOR HEALTHCARE RESEARCH AND QUALITY

	2009 Actual	2010 Estimate	2011 Estimate
Executive Level I.....	4	4	4
Executive Level II.....	1	1	1
Executive Level III.....	2	2	2
Executive Level IV.....	1	1	1
Executive Level V.....	1	1	1
Subtotal.....	9	9	9
Total Executive Level Salaries.....	\$1,547,240	\$1,592,500	\$1,639,100
Total - SES.....	5	5	5
Total - SES Salaries.....	\$ 845,476	\$ 870,207	\$ 895,660
GS-15.....	54	59	59
GS-14.....	75	80	80
GS-13.....	49	58	68
GS-12.....	25	33	36
GS-11.....	10	13	15
GS-10.....	3	2	2
GS-9.....	11	15	15
GS-8.....	6	8	8
GS-7.....	11	12	12
GS-6.....	3	3	3
GS-5.....	2	2	2
GS-4.....	0	0	0
GS-3.....	1	1	1
GS-2.....	0	0	0
GS-1.....	0	0	0
Subtotal.....	250	286	301
Average GS grade.....	12.8	12.7	12.7
Average GS salary.....	\$90,154	\$89,846	\$91,733
Recovery Act.....	0	38	0

1/ Excludes Special Experts, Services Fellows and Commissioned Officer positions.

FY 2011 Enterprise Information Technology and Government-wide E-Gov Initiatives

AHRQ will use \$215,499 of its FY 2011 Request to support Department-wide enterprise information technology and government-wide E-Government initiatives. Operating Divisions help to finance specific HHS enterprise information technology programs and initiatives, identified through the HHS Information Technology Capital Planning and Investment Control process, and the government-wide E-Government initiatives. The HHS enterprise initiatives meet cross-functional criteria and are approved by the HHS IT Investment Review Board based on funding availability and business case benefits. Development is collaborative in nature and achieves HHS enterprise-wide goals that produce common technology, promote common standards, and enable data and system interoperability.

Of the amount specified above, \$71,314 is allocated to developmental government-wide E-Government initiatives for FY 2011. This amount supports these government-wide E-Government initiatives as follows:

FY 2011 Developmental E-Gov Initiatives*	
Line of Business - Human Resources	\$654
Line of Business - Grants Management	\$639
Line of Business - Financial	\$6,021
Line of Business - Budget Formulation and Execution	\$4,000
Line of Business - Federal Health Architecture	\$60,000
FY 2011 Developmental E-Gov Initiatives Total	\$71,314

* Specific levels presented here are subject to change, as redistributions to meet changes in resource demands are assessed.

Prospective benefits from these initiatives are:

Lines of Business-Human Resources Management: Provides standardized and interoperable HR solutions utilizing common core functionality to support the strategic management of Human Capital. HHS has been selected as a Center of Excellence and will be leveraging its HR investments to provide services to other Federal agencies.

Lines of Business-Grants Management: Supports end-to-end grants management activities promoting improved customer service; decision making; financial management processes; efficiency of reporting procedure; and, post-award closeout actions. The Administration for Children and Families (ACF), is a GMLOB consortia lead, which has allowed ACF to take on customers external to HHS. These additional agency users have allowed HHS to reduce overhead costs for internal HHS users. Additionally, NIH is an internally HHS-designated Center of Excellence. This effort has allowed HHS agencies using the NIH system to reduce grants management costs. Both efforts have allowed HHS to achieve economies of scale and efficiencies, as well as streamlining and standardization of grants processes, thus reducing overall HHS costs for grants management systems and processes.

Lines of Business –Financial Management: Supports efficient and improved business

performance while ensuring integrity in accountability, financial controls and mission effectiveness by enhancing process improvements; achieving cost savings; standardizing business processes and data models; promoting seamless data exchanges between Federal agencies; and, strengthening internal controls.

Lines of Business-Budget Formulation and Execution: Allows sharing across the Federal government of common budget formulation and execution practices and processes resulting in improved practices within HHS.

Lines of Business-Federal Health Architecture: Creates a consistent Federal framework that improves coordination and collaboration on national Health Information Technology (HIT) Solutions; improves efficiency, standardization, reliability and availability to improve the exchange of comprehensive health information solutions, including health care delivery; and, to provide appropriate patient access to improved health data. HHS works closely with federal partners, state, local and tribal governments, including clients, consultants, collaborators and stakeholders who benefit directly from common vocabularies and technology standards through increased information sharing, increased efficiency, decreased technical support burdens and decreased costs.

In addition, \$76,579 is allocated to ongoing government-wide E-Government initiatives for FY 2011. This amount supports these government-wide E-Government initiatives as follows:

FY 2011 Ongoing E-Gov Initiatives*	
E-Rule Making	\$7,245
Grants.Gov	\$49,544
Integrated Acquisition Environment	\$19,790
FY 2011 Ongoing E-Gov Initiatives Total	\$76,579

*Specific levels presented here are subject to change, as redistributions to meet changes in resource demands are assessed.

Please note: AHRQ's FY 2011 OMB Circular A-11, Exhibit 300: Capital Asset Plan and Business Case Summaries can be found at <http://it.usaspending.gov/>.

Significant Items

FY 2010 HOUSE REPORT NO. 111-222

Ambulatory Patient Safety

1. HOUSE (Rept. 111-222) p. 153/ 154

The Committee recognizes AHRQ's efforts to examine the risks associated with the migration of healthcare into ambulatory settings. In light of the growing number of incidents involving syringe reuse and hepatitis C transmission across the country, the Committee urges AHRQ to expand the ambulatory safety and quality program to identify the inherent risks in ambulatory settings and to develop potential solutions for protecting patients. AHRQ is encouraged to partner with CDC for assessment, content expertise, and evaluation activities to enable these efforts.

Action Taken or to be Taken:

Since 2007, AHRQ has funded several patient safety initiatives that directly addressed the patient safety and quality needs of patients in the ambulatory care settings. Specifically, the three-year *Risk Informed Intervention Development and Implementation of Safe Practices in Ambulatory Care Settings* projects have focused on the identification, development, testing and implementation of safe practice interventions in the ambulatory care settings. Building on a set of successful planning grants, AHRQ issued another funding opportunity announcement in 2008 and several proposals were awarded funds, e.g. implementation interventions were proposed for home care settings, transfer of pediatric patients from the NICU to an ambulatory care and for conditions such as ambulatory procedural sedation.

In preparation for FY 2010 funding, the Agency worked in close collaboration with the CDC, CMS, and the Office of the Secretary to identify healthcare-associated infections (HAI)-related projects focused on the ambulatory setting including assisted living facilities, outpatient clinics, and primary care practices at the community level. Expanding on the highly successful *Keystone Project*, the Agency will fund efforts to implement and test the CUSP model in ambulatory care settings nationwide. The Agency is working closely with HHS to ensure that all of the FY 2010 initiatives are in close alignment with *HAI National Action Plan* second tier level implementation focus: ambulatory surgical care centers and dialysis units. We look forward to collaborating with CDC and others, as we have successfully done with our HAI work, on finding the most effective ways of protecting patients from hepatitis C.

Methicillin-Resistant Staphylococcus Aureus (MRSA) Collaborative Research Initiative

2. HOUSE (Rept. 111-222) p.153

The Committee urges AHRQ to support investigator-initiated research aimed at identifying new interventions to reduce infections. Just as the basic science of the agents that cause HAIs is evolving, so is the knowledge about how to prevent and treat them. Although in some cases adequate knowledge about how to reduce HAIs is available and the primary barrier is how to implement and apply that knowledge, in other cases, optimal solutions are not apparent. Support for novel approaches is one way to expand the arsenal of interventions aimed at reducing HAIs, including MRSA.

Action Taken or to be Taken:

AHRQ developed a funding opportunity announcement (FOA) that was posted in January 2010, and will be awarded in early spring 2010 to prevent and more effectively manage healthcare-associated infections in the both hospital and ambulatory care settings. Specifically, the FOA research priorities are the 1) development, implementation, and demonstration of the prevention and management of HAIs, along with the determination of the costs of such interventions; 2) determination of the efficacy, effectiveness, and costs of the preventive interventions; 3) population-level studies on the patient risk factors, sources, and disease genotypes of antibiotic-resistant organisms that can result in perceived HAIs. The scientific and practical knowledge to be achieved through these funded research efforts will identify the practical and cost-effective approaches to preventing and managing HAIs.

Maternity Care Models

3. HOUSE (Rept. 111-222) p. 152

Therefore, the Committee encourages AHRQ to study the comparative effectiveness of different maternity care models and practices, including both physician and non-physician providers; all three birth settings of hospital, birth centers, and planned home birth; and the practices of elective induction, primary elective cesarean section, and repeat cesarean section.

Action Taken or to be Taken:

AHRQ agrees that safe and effective maternity care models and practices are important research areas. AHRQ will explore the appropriate mechanisms and study designs under which these types of studies can be conducted. AHRQ welcomes the opportunity to work with maternity care providers to help determine effective strategies to examine the various maternity care models and practices.

Crosscutting Activities Related to Quality, Effectiveness, and Efficiency Research

4. HOUSE (Rept. 111-222) p. 154

The Committee values AHRQ for its critical role in supporting health services research to improve health care quality, reduce costs, advance patient safety, decrease medical errors, eliminate health care disparities, and broaden access to essential services. However, the Committee is troubled that AHRQ's investigator-initiated research portfolio has languished even though many of the sentinel studies that have changed the face of health and health care in the U.S. are the result of researchers' ingenuity and creativity. The Committee provides AHRQ additional funding for investigator-initiated research to advance discovery and the free marketplace of ideas.

Action Taken or to be Taken:

AHRQ is continuing to make strides toward increasing opportunities in the area of investigator-initiated research. The Agency greatly appreciates the additional resources that the Committee has provided AHRQ. Investigator-initiated research has provided the foundation for many of AHRQ's current program and activities. In response, AHRQ is expanding its funding for large and small investigator-initiated research grants, as well as research demonstration grants. AHRQ will fund projects with a balanced approach across the array of Agency research priorities. AHRQ will commence funding for these grants immediately, and continue through the fiscal year.

Building the Next Generation of Researchers

5. HOUSE (Rept. 111-222) p. 154

The Committee is concerned about declines in the number of, and funding for, training grants for the next generation of researchers. The Committee urges AHRQ to provide greater support to pre- and post-doctoral training grants and fellowships to ensure America stays competitive in the global research market.

Action Taken or to be Taken:

The Agency for Healthcare Research and Quality is deeply committed to addressing the needs for pre- and postdoctoral training to support the growing needs of the global research market. In FY 2010 AHRQ will allocate funds provided through the American Recovery & Reinvestment Act of 2009 (ARRA) to support pre- and post-doctoral training through the National Research Service Award (NRSA) institutional training programs. Approximately \$5 million in grant funds will be awarded for postdoctoral training of health services and clinical researchers who have made a commitment to focus their research in the area of comparing the effectiveness of different medical options. The Agency anticipates making approximately 5-7 institutional awards which would support approximately 30 to 40 postdoctoral fellows over a 3 year award period in this research area. Additionally AHRQ will continue its long-standing support for pre- and post-doctoral training through the NRSA program, providing support for approximately 200 pre and postdoctoral trainees.

Broadening the Evidence Base in Response to Health Care

6. HOUSE (Rept. 111-222) p. 155

The Committee recognizes that AHRQ's research portfolio focuses predominantly on patient safety, health care quality, and patient-centered health research. Unfortunately, these efforts have included less research on ways to improve the quality and efficiency of the health care system as a whole, and have resulted in relatively little funding to study what drives health care costs or to determine how to achieve needed improvements in efficiency. The Committee urges AHRQ to develop a more balanced research agenda, supporting all aspects of health care research outlined in its statutory mission, including, the costs, utilization of, and access to, health care and the ways in which health care services are organized, delivered, and financed.

Action Taken or to be Taken:

AHRQ continues to work toward achieving a more balanced research portfolio. While targeted research investments have comprised a large portion of our budget, the additional resources that the Committee has provided in area of investigator-initiated research will enable the Agency to expand its research agenda to include broader aspects of health care, including organization and delivery of health services. In response, AHRQ is expanding its funding for large and small investigator-initiated research grants, as well as research demonstration grants. AHRQ will fund projects with a balanced approach across the array of Agency research portfolios. AHRQ will commence funding for these grants immediately, and continue through the fiscal year.

Diabetes

7. HOUSE (Rept. 111-222) p. 155

The Committee encourages AHRQ to seek to advance the development of an appropriate A1c management quality measure by providing support to develop a new measure or measures and/or ways to adapt current measures to support this goal. This could be in the form of support to groups that have large A1c databases, such as the Veterans Administration system or one of AHRQ's Accelerating Change and Transformation in Organizations and Networks partners.

Action Taken or to be Taken:

Intensive management of blood glucose levels as reflected in the A1c, is believed to reduce the risk of long term complications associated with type 2 diabetes. Groups have worked to develop quality measures based on the A1c level for many years. However, one of the key reasons that the Physician Quality Reporting Initiative and other initiatives do not use A1c is because they depend on claims data which can only tell you if the test was ordered, but not the result. AHRQ is actively supporting efforts with ARRA funding and through our core programs to enhance the utility of supplementing administrative billing (claims) data with clinical electronic data, including laboratory test results such as

A1c.

Currently, AHRQ is seeking to advance A1c quality measurement in a number of ways. Several AHRQ-sponsored studies are underway in the Effective Health Care Program's Diabetes Multi-Center Research Consortium (DMCRC). These studies will help to identify optimal therapies and glycemic control for different patient populations. A study in progress is specifically examining the relative effectiveness of intensive glycemic control vs. conventional control in type 2 diabetes, addressing the question in a real-world setting utilizing electronic health care records from a large cohort of approximately 30,000 patients drawn from five health systems between 2002 and 2009. Other relevant relative effectiveness studies examine the impact of various oral antidiabetic drugs, insulin and combination therapies, and bariatric surgery on the A1c level and long term complications. These studies all utilize electronic healthcare records including local and national data from the Veterans Affairs (VA) Healthcare system, data from the Baylor Health Care System (BHCS) in Dallas, Texas and the Christiana Care Health System (CCHS) in Delaware, and data from three HMO Research Network health systems: Kaiser Permanente Northern California, Kaiser Permanente Southern California, and HealthPartners in Minneapolis.

As a member of the Diabetes Mellitus Interagency Coordinating Committee (DMICC), AHRQ communicates and collaborates with other members of the Department of Health and Human Services and other federal agencies to identify effective practices and barriers to improved care for individuals with diabetes. Future meetings will discuss the impact of different therapies on outcomes for diabetes from the federal perspective.

AHRQ is also interested in expanding research related to patient adherence with treatments for diabetes. High proportions of patients with diabetes do not adhere to provider recommendations about diet, weight loss, exercise, and pharmacologic treatment. A better understanding of causes of non-adherence with treatments for diabetes could ultimately yield corresponding quality measures.

Mindfulness-based Stress Reduction

8. HOUSE (Rept. 111-222) p.155

Mindfulness-based stress reduction (MBSR) is the most commonly used meditation-based intervention in medical settings in the U.S. There is a growing body of scientific literature that has examined the impact of MBSR on pain, brain function, immune function, and on the symptoms and underlying biological mediators of some diseases, such as cardiovascular disease, psoriasis, and cancer. However, the extent to which MBSR might affect health care utilization has never been systemically studied. Even modest reductions in health care utilization could translate into significant dollar savings cumulatively throughout the nation and may have implications for health care policy. The Committee urges AHRQ to support research to determine whether MBSR impacts health care utilization.

Action Taken or to be Taken:

AHRQ aims to improve the quality, safety, efficiency, and effectiveness of the delivery of evidence-based preventive services and chronic care management in ambulatory care settings. The relationships among psychological well-being, physical health, and the impact of stress reduction interventions on health care utilization are within the AHRQ's Prevention/ Care Management Portfolio's scope and interest. AHRQ would be interested in receiving, reviewing, and potentially funding investigator-initiated grant applications for research projects that focus on the impact of mindfulness-based stress reduction on health care utilization. AHRQ also would consider funding conferences that address this important topic.

FY 2010 SENATE REPORT NO. 111-66

Lyme Disease

1. **SENATE (Rept. 111- 66) p. 133**

The Committee encourages AHRQ to create a comprehensive clearinghouse of peer-reviewed tick-borne diseases literature that will include literature on persistent infection, appropriately organized for use by the scientific community, treating physicians, and the public.

Action Taken or to be Taken:

AHRQ agrees that there is significant uncertainty regarding the existing evidence and definition of persistent infection with tick-borne diseases. AHRQ recognizes the seriousness of tick-borne illness. In 2008, nearly 29,000 confirmed cases of Lyme disease, alone, were reported to the CDC. AHRQ will explore different options for providing current scientific information in a usable format for scientists, clinicians, and patients on tick-borne diseases.

Building the Next Generation of Researchers

2. **SENATE (Rept. 111- 66) p.133**

The Committee is deeply concerned about declines in the number of, and funding for, training grants for the next generation of researchers. The Committee urges AHRQ to provide greater support to pre- and post-doctoral training grants and fellowships to ensure America stays competitive in the global research market.

Action Taken or to be Taken:

The Agency for Healthcare Research and Quality is deeply committed to addressing the needs for pre- and postdoctoral training to support the growing needs of the global research market. In FY 2010 AHRQ will allocate funds provided through the American Recovery & Reinvestment Act of 2009 (ARRA) to support pre- and post-doctoral training through the National Research Service Award (NRSA) institutional training programs. Approximately \$5 million in grant funds will be awarded for postdoctoral training of health services and clinical researchers who have made a commitment to focus their research in the area of comparing the effectiveness of different medical options. The Agency anticipates making approximately 5-7 institutional awards which would support approximately 30 to 40 postdoctoral fellows over a 3 year award period in this research area. Additionally AHRQ will continue its long-standing support for pre- and post-doctoral training through the NRSA program, providing support for approximately 200 pre and postdoctoral trainees.

Comparative Effectiveness Research

3. SENATE (Rept. 111-66) p.133

The Committee encourages AHRQ to expand the Evidence-based Practice Centers to focus on a broad range of interventions affecting health, including non-clinical programs and interventions, organizational and system characteristics, as well as policies and regulations.

Action Taken or to be Taken:

AHRQ has funded and will continue to support Evidence-based Practice Center (EPC) studies on all aspects of relevant health care. In the past, the EPC's have conducted studies that look at care coordination, bioterrorism, patient safety, health information technology, and financing and economic incentives. AHRQ expects the EPCs to continue to perform studies on non-clinical topics, such as the use, barrier, and drivers of health information technology, preventive care, and support strategies for children with special health care needs.

Diabetes

4. SENATE (Rept. 111- 66) p.133

The Committee notes that appropriate management of hemoglobin A1c can reduce the risk of complications of diabetes. Yet several quality measurement programs such as CMS' Physician Quality Reporting Initiative do not reward appropriate management of hemoglobin A1c due to the lack of consensus on a methodology for developing outcomes-focused measures. The Committee urges AHRQ to advance the development of an appropriate A1c management quality measure, possibly through support of organizations that have large A1c databases, such as the Veterans Administration system, or one of AHRQ's Accelerating Change and Transformation in Organizations and Networks [ACTION] partners.

Action Taken or to be Taken:

Intensive management of blood glucose levels as reflected in the A1c, is believed to reduce the risk of long term complications associated with type 2 diabetes. Groups have worked to develop quality measures based on the A1c level for many years. However, one of the key reasons that the Physician Quality Reporting Initiative and other initiatives do not use A1c is because they depend on claims data which can only tell you if the test was ordered, but not the result. AHRQ is actively supporting efforts with ARRA funding and through our core programs to enhance the utility of supplementing administrative billing (claims) data with clinical electronic data, including laboratory test results such as A1c.

Currently, AHRQ is seeking to advance A1c quality measurement in a number of ways. Several AHRQ-sponsored studies are underway in the Effective Health Care Program's

Diabetes Multi-Center Research Consortium (DMCRC). These studies will help to identify optimal therapies and glycemic control for different patient populations. A study in progress is specifically examining the relative effectiveness of intensive glycemic control vs. conventional control in type 2 diabetes, addressing the question in a real-world setting utilizing electronic health care records from a large cohort of approximately 30,000 patients drawn from five health systems between 2002 and 2009. Other relevant relative effectiveness studies examine the impact of various oral antidiabetic drugs, insulin and combination therapies, and bariatric surgery on the A1c level and long term complications. These studies all utilize electronic healthcare records including local and national data from the Veterans Affairs (VA) Healthcare system, data from the Baylor Health Care System (BHCS) in Dallas, Texas and the Christiana Care Health System (CCHS) in Delaware, and data from three HMO Research Network health systems: Kaiser Permanente Northern California, Kaiser Permanente Southern California, and HealthPartners in Minneapolis.

As a member of the Diabetes Mellitus Interagency Coordinating Committee (DMICC), AHRQ communicates and collaborates with other members of the Department of Health and Human Services and other federal agencies to identify effective practices and barriers to improved care for individuals with diabetes. Future meetings will discuss the impact of different therapies on outcomes for diabetes from the federal perspective.

AHRQ is also interested in expanding research related to patient adherence with treatments for diabetes. High proportions of patients with diabetes do not adhere to provider recommendations about diet, weight loss, exercise, and pharmacologic treatment. A better understanding of causes of non-adherence with treatments for diabetes could ultimately yield corresponding quality measures.

Moving Research Into Practice

5. SENATE (Rept. 111- 66) p.133

Health services research has great potential to improve health and health care when widely disseminated and used. The Committee supports AHRQ's research translation activities, including practice-based research centers and learning networks that are designed to better understand health care delivery and move the best available research and decisionmaking tools into health care practice. The Committee encourages AHRQ to expand these programs.

Action Taken or to be Taken:

AHRQ is building on its successful efforts to translate and disseminate research so it can be used to improve practice and policy. For example, the Agency supports research networks that rapidly develop and assess methods and tools to assure that new scientific evidence is incorporated into clinical care in real-world practice settings. These networks include a group of ten primary care practice-based research networks (PBRNs) comprised of over 2000 community-based practices that are located across the country and provide primary care services for 12 million Americans, and the Accelerating Change and Transformation in Organizations and Networks (ACTION), which consist of 15 large

partnerships and collaborating organizations that provide health care to more than 100 million Americans.

AHRQ also is supporting a number of learning networks designed to bring together organizations to learn about and implement AHRQ-supported research and tools. For example, the AHRQ Learning Network for Chartered Value Exchanges is a national program which brings together 24 regional health improvement collaboratives from across the country. In aggregate, these collaboratives involve more than 575 health care leaders and represent over 124 million lives. In addition, AHRQ's Knowledge Transfer and Implementation Program works to promote and encourage the use of AHRQ tools, products, and initiatives by various stakeholders. The project includes projects targeted to clinicians, pharmacists, purchasers as well as a series of learning networks, such as the Elders Prevention Learning Network, Hispanic Elders Learning Network, Long-Term Care Quality Improvement Learning Network, Medicaid Care Management Learning, Medicaid Medical Directors' Learning Network, and the Quality Indicators Learning Institute.

AHRQ will continue to look for opportunities to expand programs that support research translation activities.

Quality in Endoscopy

6. SENATE (Rept. 111-66) p. 133

Gastrointestinal [GI] endoscopic procedures, such as colonoscopy, and other outpatient procedural services represent a significant portion of healthcare spending, yet little attention has been focused on quality improvement. The Committee encourages AHRQ to validate already published quality measures for procedural services and to identify best practices that can improve patient outcomes. Collection of procedure and outcomes data from healthcare providers will be an important part of the effort to improve the quality of procedural services such as GI endoscopy.

Action Taken or to be Taken:

AHRQ agrees that quality gastrointestinal endoscopic procedures are an important component of health care for screening and diagnostic purposes. AHRQ will explore ways to identify valid quality measures for these procedures and the mechanisms for collecting both procedural and outcomes data from providers. AHRQ will meet with experts in the area of endoscopy, including representatives of the American Society of Gastrointestinal Endoscopy, to explore potential opportunities for improving the quality of endoscopy.

Restoring Innovation and Competitiveness

7. SENATE (Rept. 111- 66) p.133/134

The Committee is pleased that AHRQ is working to address the decline in investigator-

initiated research opportunities through its Innovations Research Portfolio. The Committee provides funding for AHRQ to expand this grant making program to advance discovery and the free marketplace of ideas, and urges AHRQ to provide more opportunities for investigator-initiated research through its other core programs, including the Effective Health Care Program .

Action Taken or to be Taken:

AHRQ is continuing to make strides toward increasing opportunities in the area of investigator-initiated research. The Agency greatly appreciates the additional resources that the Committee has provided AHRQ. Investigator-initiated research has provided the foundation for many of AHRQ's current program and activities. To this end, AHRQ is developing plans to include more investigator-initiated grant opportunities that impact a broader spectrum of the Agency's programs, such as the Effective Health Care Program. We look forward to working with the Committee and the Agency's stakeholders to develop a more comprehensive investigator-initiated research portfolio.

Temporomandibular Joint and Muscle Disorders

8. SENATE (Rept. 111-66) p.134

The Committee is aware that temporomandibular joint and muscle disorders [TMJDs] affect over 35 million people in the United States. Symptoms of this disorder range from mild discomfort to severe pain that causes limitations in speaking, chewing and swallowing. Health care practitioners have amassed over 50 treatments for TMJDs with virtually no evidence of safety or efficacy based on randomized controlled clinical trials. The Committee urges AHRQ to conduct a study of the per-patient cost and efficacy/effectiveness of treatments for TMJDs, focusing on developments after a similar study was prepared in 2001.

Action Taken or to be Taken:

AHRQ understands the importance and burden of illness TMJD places on the American public. AHRQ will explore how to assess the existing literature and proposed treatments for TMJD and what specific new research would need to be conducted to address the underlying uncertainty about the effectiveness of different treatments.

Consolidated Appropriations Conference Report, 2010

Patient-Centered Health Research

CONFERENCE REPORT (Rept. 111-117) p.1034

As proposed by the House, the conferees do not intend for the patient-centered health research funding to be used to mandate coverage, reimbursement, or other policies for any public or private payer. The funding shall be used to conduct or support research to evaluate and compare the clinical outcomes, effectiveness, risk, and benefits of two or more medical treatments and services that address a particular medical condition. Further, the conferees recognize that a “one-size-fits-all” approach to patient treatment is not the most medically appropriate solution to treating various conditions. Research conducted should be consistent with Departmental policies relating to the inclusion of women and minorities. The Senate did not propose similar language.

Action Taken or to be Taken:

AHRQ does not conduct research that mandates coverage or reimbursement for public and private payers. The funding is used to conduct or support research to evaluate and to compare the clinical outcomes, effectiveness, risk, and benefits of two or more medical treatments and services that address a particular medical condition. Additionally, AHRQ actively pursues research on under-represented populations and the effect of services on individual patients. In fact, the Agency plans to invest in a series of studies that measure the relative benefits that different treatments produce in routine clinical practice and will include novel study designs focusing on real-world under represented populations (children, elderly, racial and ethnic minorities, and other underserved populations).