DEPARTMENT
of HEALTH
and HUMAN
SERVICES

Agency for Healthcare Research and Quality

FY 2011 Online Performance Appendix

Introduction

The FY 2011 Online Performance Appendix is one of several documents that fulfill the Department of Health and Human Service's (HHS) performance planning and reporting requirements. HHS achieves full compliance with the Government Performance and Results Act of 1993 and Office of Management and Budget Circulars A-11 and A-136 through the HHS agencies' FY 2011 Congressional Justifications and Online Performance Appendices, the Agency Financial Report, and the HHS Citizens' Report. The documents are available at http://www.hhs.gov/budget/.

The FY 2011 Congressional Justifications and accompanying Online Performance Appendices contain the updated FY 2009 Annual Performance Report and FY 2011 Annual Performance Plan. The Agency Financial Report provides fiscal and high-level performance results. The HHS Citizens' Report summarizes key past and planned performance and financial information.

Transmittal Letter

Agency for Healthcare Research and Quality
HHS FY 2011 Online Performance Appendix
Data Quality Assurance Statement

The Department of Health and Human Services (HHS) hereby publishes the AHRQ component of the FY 2011 Online Performance Appendix, which features program performance data that have been provided by my Operating Division. As required by the Reports Consolidation Act of 2000, the Secretary of HHS will provide an assessment of the completeness and reliability of the performance data presented in this report. As part of this assessment, the Secretary will describe any material inadequacies in the accuracy, completeness, reliability of the data and will identify actions to be take to resolve such inadequacies.

I recognize that the Secretary relies upon the assurances provided by my Operating Division in providing this assessment. To the best of my knowledge, the performance data reported by my Operating Division for inclusion in the FY 2011 Online Performance Appendix is accurate, complete, and reliable.

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

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Summary of Targets and Results

Fiscal Year	Total Targets	Targets with Results Reported	Percent of Targets with Results Reported	Total Targets Met	Percent of Targets Met
2006	41	41	100%	40	98%
2007	41	41	100%	39	95%
2008	47	46	98%	44	96%
2009	40	39	98%	38	97%
2010	43	0	0%	0	0%
2011	43	0	0%	0	0%

Performance Detail (by Activity):

Patient-Centered Health Research

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 9 of the 2011 AHRQ Congressional Justification published at http://www.ahrq.gov/about/cj2011/cjweb11.htm.

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).

Effective Health Care
Priority Conditions

- 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

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:

- 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 car7e 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) place 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. In the process of developing this measure, AHRQ had been working to identify measures from the National Health Care Quality Report (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 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.

A new measure is under development, # 1.3.55, which will track the use of Effective Health Care findings in clinical decision making. Possible data sources for this measure we are exploring are AHRQ's National Guideline Clearinghouse and National Quality Measures Clearinghouse.

Long-Term Objective: Improve patients' quality of care and health outcomes through informed decisionmaking by patients, providers, and policymakers.

Measure	FY	Target	Result
4.4.5: Increase the number of Effective Health Care (EHC) Program products available for use by clinicians, consumers, and policymakers.[1] *(Output)*	*2011*	1 SRs 2 SGs 7 EHC Research Reports	Oct 31, 2011
	2010	3 SRs 6 SGs 14 EHC Research Reports	Oct 31, 2010
	2009	10 SR 22 SG	6 SRs 13 SGs 16 EHC Research Reports (Target Met)
	2008	7 SR 8 SG	7 SR 12 SG (includes 2 SG translated into Spanish) (Target Met)
	2007	N/A	4 SR 8 SG (Target Met)

Measure	FY	Target	Result
	2006	N/A	4 SR 1SG (Target Met)
1.3.24: Decrease mortality from and increase receipt of recommended care for subset of diseases measured and reported on in the National Health Care Quality Report (Developmental) (Interim Output)	*2011*	Set Baseline	Dec 31, 2011
	2010	Initiate development of alternate measure to more accurately measure the program goals	Dec 31, 2010
	2009	1st and 2nd Qtr – Obtain baseline measures 3rd and 4th Qtr – Set targets for FY 2010 – 2019	Continued work with contractors to develop the measure
	2008	Identify measures and limit to a subset based on priority conditions; work with AHRQ's planning, evaluation, and analysis contractors to limit to ~3 metrics to be tracked	Measures identified and a subset based on priority conditions has been analyzed
	2007	NA	AHRQ created new Comparative Effectiveness Portfolio
	2006	NA	AHRQ launched new Effective Health Care Program
1.3.25: 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.[1] *(Output)*	*2011*	1030 Orders	Oct 31, 2011
	2010	981 Orders	Oct 31, 2010
	2009	1st and 2nd Qtr – Obtain baseline data for this performance measure 3rd and 4th Quarter – Set targets for FY 2010 – 2019	934 Baseline (Orders for 50+ copies of EHC Program products)
	2008	Work with AHRQ Effective Health Care's Eisenberg Center, Scientific Resource Center, and Stakeholder Group to identify methods for systematically identifying organizations that are disseminating SR and SG	Have not completed identifying methods for systematically identifying organizations that are disseminating SR and SG (Target Met)
	2007	N/A	N/A
	2006	N/A	N/A
	2011	24%	Oct 31, 2011

Measure	FY	Target	Result
1.3.26: Increase the percentage of stakeholders who report they use Effective Health Care (EHC) Program products as a resource[1] *(Output)*	*2010*	22%	Oct 31, 2010
	2009	1st and 2nd Qtr – Obtain baseline data for this performance measure 3rd and 4th Qtr – Set targets for FY 2010 – 2019	20% Baseline
	2008	Work with the Medicaid Medical Directors (AHRQ Learning Network) and Health Plans to identify methods for systematically reviewing policy decisions for references to evidence from the Portfolio	Worked with Medicaid Medical Directors Learning Network to develop process for identifying how CE Portfolio products are used by these State clinical policymakers (Target Met)
	2007	N/A	N/A
	2006	N/A	N/A
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 (Developmental)	*2011*	Establish Targets	Dec 31, 2011
	2010	Set Baseline	Dec 31, 2010
	2009	NA	NA
	2008	NA	NA
	2007	NA	NA
	2006	NA	NA

1/ FY 2010 targets reflect activities associated with annually-appropriated dollars. Please see “Recovery Act Obligations and Performance” on page 9 of the 2011 Congressional Justification published at http://www.ahrq.gov/about/cj2011/cjweb11.htm for additional performance targets related to this portfolio using Recovery Act funds.

Measure	Data Source	Data Validation
4.5.4	All AHRQ systematic reviews and summary guides are entered into a database, which is used to populate the AHRQ Effective Health Care Program Web site, http://effectivehealthcare.ahrq.gov/.	Effective Health Care Program staff will develop and document a methodology that will be used annually to check data
1.3.24	National Healthcare Quality Report (NHQR) Appendix A: Data Sources provide information about each database analyzed for the NHQR, including data type, sample design, and primary content.	Data are validated annually by Federal public release data source NHQR. Data are analyzed, synthesized, and reported using established methodology

Measure	Data Source	Data Validation
1.3.25	Requests for copies of AHRQ publications (ordered by title and publication number) are 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 comparative effectiveness research reports and summary guides.	Effective Health Care Program staff will develop and document a methodology that will be used annually to check data
1.3.26	Data from this output is available from AHRQ's Medicaid Medical Director's Learning Network (MMDLN). At an annual meeting, members of MMDLN report on how they use AHRQ's comparative effectiveness research reports and summary guides.	MMDLN members report their usage in a written document and AHRQ staff follow-up with members to verify information provided
1.3.55	TBD	TBD

Prevention and Care Management

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.

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.

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.

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 Center[1] 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 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'

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[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.*

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.

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 *e*PSS. 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 alligned with the NQF process with a long-term goal of seeking NQF endorsement of care coordination measures developed through this process.

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.

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.

Measure	FY	Target	Result
2.3.7: Increase the percentage older adults who receive appropriate clinical preventive services *(Outcome)*	*2011*	Obtain findings from the 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	Oct 31, 2011
	2010	Develop specifications for 2 composite measures	Oct 31, 2010
	2009	NA	NA
	2008	NA	NA
	2007	NA	NA
	2006	NA	NA
2.3.8: 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. *(Outcome)*	*2011*	Final report on implementation of a toolkit to facilitate change in primary care and the role of practice coaching	Oct 31, 2011
	2010	Develop culturally-appropriate curriculum for clinical teams to support self management Develop report on current state of knowledge and models linking clinical practices with community resources	Oct 31, 2010
	2009	NA	NA
	2008	NA	NA
	2007	NA	NA
	2006	NA	N/A
2.3.9: Increase rates of adults who report receiving counseling about a healthy diet and physical activity from their primary care practice. *(Outcome)*	*2011*	Update USPSTF recommendation(s) on counseling to promote a healthy diet and physical activity Develop a baseline	Oct 31, 2011

Measure	FY	Target	Result
	2010	Develop evidence reports on counseling to promote a healthy diet and physical activity Develop dissemination and implementation situational analysis for counseling to promote a healthy diet and physical activity	Oct 31, 2010
	2009	NA	NA
	2008	NA	NA
	2007	NA	NA
	2006	NA	NA

Measure	Data Source	Data Validation
2.3.7	TBD	TBD
2.3.8	TBD	TBD
2.3.9	TBD	TBD

Value

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 polcymakers. 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.
<u>Reason for Retirement</u>: 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
<u>Reason for Retirement</u>: 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.

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.).

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.

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

Measure	FY	Target	Result
1.3.29: Increase the number of States or communities reporting market-level hospital cost data	*2011*	Maintain at 16	Sep 30, 2011
	2010	Maintain at 16	Sep 30, 2010
	2009	16	16
	2008	4	16
	2007	NA	NA
	2006	NA	NA
1.3.30: Increase the cumulative number of communities or States with public report cards	*2011*	20	Dec 30, 2011
	2010	19	Dec 30, 2010
	2009	18	18
	2008	5	15
	2007	NA	NA
	2006	NA	NA
1.3.31: Increase the cumulative number of databases, data enhancements, articles, analyses,	*2011*	38	Oct, 31, 2011
	2010	28	Oct 31, 2010

Measure	FY	Target	Result
reports, and evaluations on health care value that are disseminated *(Output)*	*2009*	18	21 (Target Exceeded)
	2008	5	13 (Target Exceeded)
	2007	NA	NA
	2006	NA	NA
1.3.50: SYNTHESIS_Increase the cumulative number of AHRQ measures, tools, upgrades, and syntheses available on healthcare value. *(Output)*	*2011*	46	Oct 31, 2011
	2010	41	Oct 31, 2010
	2009	NA	NA
	2008	NA	NA
	2007	NA	NA
	2006	NA	NA
1.3.51: DISSEMINATION_Increase the cumulative number of measures, datasets, tools, articles, analyses, reports, and evaluations on healthcare value that are disseminated. *(Output)*	*2011*	20	Oct 31, 2011
	2010	10	Oct 31, 2010
	2009	NA	NA
	2008	NA	NA
	2007	NA	NA
	2006	NA	NA
1.3.53: Increase the cumulative number of AHRQ measures and tools used in national, state, or community public report cards. *(Output)*	*2011*	21	Oct 31, 2011
	2010	18	Oct 31, 2010
	2009	NA	NA
	2008	NA	NA
	2007	NA	NA
	2006	NA	NA
1.3.54: Increase the cumulative use of AHRQ articles, analyses, reports, evaluations, measures, datasets, and tools on healthcare value and strategies. *(Output)*	*2011*	20	Oct 31, 2011
	2010	10	Oct 31, 2010
	2009	NA	NA
	2008	NA	NA
	2007	NA	NA

Measure	FY	Target	Result
	2006	NA	NA

Measures	Data Source	Data Validation
1.3.29	AHRQ staff and contractors for Quality Indicators and Chartered Value Exchanges Learning Network	A yearly review of the posted National State or Community report cards and the number of AHRQ measures they contain, plus the number of report cards that rely upon the use of AHRQ tools such as EQUIPS and the Quality Indicators Learning Institute contractor.
1.3.30	AHRQ staff and contractors for Quality Indicators and Chartered Value Exchanges Learning Network	A yearly review of the posted National State or Community report cards and the number of AHRQ measures they contain, plus the number of report cards that rely upon the use of AHRQ tools such as EQUIPS and the Quality Indicators Learning Institute contractor.
1.3.31	AHRQ staff and contractors for Quality Indicators, Chartered Value Exchanges Learning Network, MEPS	Annual review of AHRQ and contractor tracking systems of completed databases, articles, etc. on health care value.
1.3.50	AHRQ staff and contractors for QIs, HCUP, MEPS	Annual review of AHRQ and contractor tracking systems of new measures, tools, etc. on health care value.
1.3.51	AHRQ staff and AHRQ Learning Network contractors	Annual review of AHRQ and contractor tracking systems of measures, datasets, etc. disseminated via various mechanisms such as webinars and Web page downloads.
1.3.53	AHRQ staff and QI, MONAHRQ, CVE contractors	Annual review of AHRQ and contractor tracking systems of measures and tools used in public report cards.
1.3.54	AHRQ staff and AHRQ Learning Network contractors	Annual review of AHRQ and contractor tracking systems of use of AHRQ articles, analyses, etc.

Health Information Technology

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 form 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.

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	FY	Target	Result
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)*	*2011*	Set out-year targets	Jan 30, 2013
	2010	Establish reliable data source and set baseline	Jan 30, 2012
	2009	Work with data analysis to clean up NAMCS raw data files, and/or find a new data source, and/or consider revising measure	Conducted data analysis of NAMCS raw data files
	2008	Review data provided by NAMCS	Inconsistencies identified with the dataset
	2007	Set Baseline	Awaiting NAMCS data CDC data delayed
	2006	N/A	N/A
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)*	*2011*	$5,661/grantee	Sep 30, 2011
	2010	$5,842/grantee	Sep 30, 2010
	2009	Set Baseline	$6,023/grantee Baseline
	2008	N/A	N/A
	2007	N/A	N/A

	2006	N/A	N/A

Measure	Data Source	Data Validation
1.3.52	National Ambulatory Medical Care Survey (NAMCS)	NAMCS – using a nationally representative sample of primary care, non-pediatric practices and their patients with coronary artery disease
1.3.48	AHRQ Internal Figures	AHRQ Internal Figures – the process includes capturing the per-grantee cost of: developing and posting annual performance summaries for each grant; developing and posting a series of products (short and long summaries) of research findings upon grant completion; and posting final reports in the National Technical Information Service database of government research. The program will monitor the process of developing and publishing these reports online by attaching resource costs to each step of the process by creating a Gantt chart to map the current process, including who currently performs each step of the process and the time that each step takes. Multiplying this by personnel costs and then summing the total costs for each step of the process will produce an annual estimate of the cost to produce these documents per grantee.

Patient Safety

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.

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.

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., HCAPS, HSOPS, PSIs, and the Medical Office Survey on Patient Safety Culture).

Measure	FY	Target	Result
1.3.37: Increase the percentage of hospitals in the U.S. using computer-based patient safety event reporting systems (PSERS) *(Long-term Outcome)*	*2011*	44%	Oct 31, 2011
	2010	34%	Oct 31, 2010
	2009	24%	Oct 31, 2009
	2008	NA	NA
	2007	NA	NA
	2006	Baseline	12%
1.3.38: Increase the number of U.S. health care organizations per year using AHRQ-supported tools to improve patient safety from the 2007 baseline (new portfolio measure) *(Output)*	*2011*	640 hospitals	Dec 31, 2012
	2010	580 hospitals	Dec 31, 2011
	2009	500 hospitals	Dec 31, 2010
	2008	450 hospitals	Dec 31, 2009
	2007	Baseline	382 hospitals
	2006	NA	NA

Measure	FY	Target	Result
1.3.39: Increase the number of patient safety events (e.g., medical errors) reported to the Network of Patient Safety Databases (NPSD) from baseline. *(Output)*	*2011*	NPSD Operational Establish Baseline	Sep 30, 2011
	2010	Publication of technical specification for Common Format (V1.1)	Sep 30, 2010
	2009	Baseline	Publication of Common Formats 1.0
	2008	NA	NA
	2007	NA	NA
	2006	NA	NA
	2005	NA	NA
1.3.5: Annual percentage reduction in the cost per capita of treating hospital-acquired infections per year (Baseline actual in 2003:$4,437.28 per capita) *(Efficiency)*	*2011*	-2%	Oct 31, 2013
	2010	-2%	Oct 31, 2012
	2009	-2%	Oct 31, 2011
	2008	-2%	Oct 31, 2010
	2007	-2%	Sep 30, 2009
	2006	N/A	N/A
1.3.40: Number of Patient Safety Organizations (PSOs) listed by HHS Secretary *(Outcome)*	*2011*	100 listed PSOs	Oct 31, 2011
	2010	85 listed PSOs	Oct 31, 2010
	2009	PSOs listed by Secretary	75 listed PSOs
	2008	Final Regulation published	PSO Final Regulation Issued (Target Met)
	2007	NA	NA
	2006	NA	NA
1.3.41: 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 *(Output)*	*2011*	92	Oct 31, 2011
	2010	86	Oct 31, 2010
	2009	76	81 (Target Exceeded)
	2008	68	73 (Target Exceeded)
	2007	Baseline	61
	2006	NA	NA

Measure	Data Source	Data Validation

Measure	Data Source	Data Validation
1.3.37	Survey to be completed every 3 years (contract TBD)	Survey contractor will develop methods to validate survey data
1.3.38	Surveys/Case studies	AHRQ staff (OCKT) and evaluation contractor (TBD) to develop methods to validate survey data and conduct case studies
1.3.39	PSOs (and the Privacy Protection Center and contractor that builds the NSPD)	The privacy center contractor monitors the number of reports in the NPSD that is submitted through the PSOs
1.3.5	HCUP/PSIs	Ongoing HCUP/PSI validation activities (HCUP and QI Project Officers use established methodology to check data).
1.3.40	AHRQ PSO web site	AHRQ PSO web site is updated weekly to reflect total number of PSOs
1.3.41	AHRQ FOAs, grant awards, and contract records	AHRQ staff (i.e., project officers, portfolio leads, grants management and contracts staff) monitor project completion and dissemination of results

Crosscutting Activities Related to Quality, Effectiveness, and Efficiency Research

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 over-arching 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. TalkingQualilty* 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.

<u>CERTS: Inappropriate Antibiotic Use in Children: Measure 4.4.1</u>

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, baselines 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.

<u>CERTs: Upper GI (Gastrointestinal) Bleeding: Measures 4.4.3 and 4.4.4:</u>
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, baselines 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).3

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 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

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3 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%.

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:

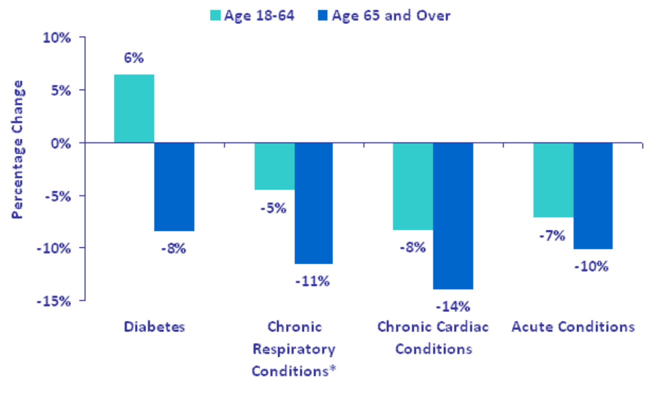
- Inflation-adjusted aggregate costs for hospital stays rose from $222.4 billion in 1997 to $343.9 billion in 2007 — an increase of 55 percent.
- The most important driver of cost increases was greater intensity of services provided during the hospital stay. Costs per discharge increased by 3.1 percent 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.

Figure 2. Rates of potentially preventable hospitalizations declined faster among older adults than among working age adults between 2003 and 2007



*Due to ICD-9-CM coding changes, the rates of potentially preventable hospitalizations for COPD are not available for 2003. The change in the rates shown here is from 2005-2007.

Source: AHRQ, Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample (NIS), 2004 and 2007.

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/ snaps08/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.

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.

Long-Term Objective 1: Reduce antibiotic inappropriate use in children between the ages of one and fourteen.

Measure	FY	Target	Result
4.4.1: The number of prescriptions of antibiotics per child aged 1 to 14 in the U.S. *(Outcome)*	*2011*	0.50 per child per year	Oct 31, 2011
	2010	0.51 per child per year	Oct 31, 2010
	2009	0.51 per child per year	0.55 per child (Target Met – Result falls within measurement error)
	2008	0.52 per child per year	0.58 per child (Target Not Met)
	2007	0.53 per child per year	0.52 per child (Target Met)
	2006	0.54 per child per year	0.60 per child (Target Not Met)

Measure	Data Source	Data Validation
4.4.1	MEPS	The MEPS family of surveys includes a Medical Provider Survey and a Pharmacy Verification Survey to allow data validation studies in addition to serving as the primary source of medical expenditure data for the survey. The MEPS survey meets OMB standards for adequate response rates, and timely release of public use data files.

Long-Term Objective 2: Reduce congestive heart failure hospital readmission rates in those between 65 and 85 years of age.

Measure	FY	Target	Result
4.4.2: The percentage of hospital readmissions within 6 months for congestive heart failure in patients between 65 and 85 years of age *(Outcome)*	*2011*	33.5%	Oct 31, 2011
	2010	34%	Oct 31, 2010
	2009	34.5%	35.48% (Target Not Met)
	2008	35%	31.91% (Target Met)
	2007	35.5%	36.51% (Target Not Met)
	2006	36%	36.74% (Target Not Met)

Measure	Data Source	Data Validation
4.4.2	HCUP	HCUP and QI Project Officers use established methodology to check data.

Long-Term Objective 3: Reduce hospitalization for upper GI bleeding in those between 65 and 85 year of age.

Measure	FY	Target	Result
4.4.3: The decrease in the rate of hospitalization for upper GI bleeding due to the adverse effects of medication or inappropriate treatment of peptic ulcer disease in patients between 65 and 85 years of age. *(Outcome)*	*2011*	-4%	Oct 31, 2011
	2010	-3.5%	Oct 31, 2010
	2009	-3%	48.25/10,000 (3.0) (Target Met)
	2008	-1.8%	49.75/10,000 (-3.5%) (Target Exceeded)
	2007	-2%	51.56/10,000 (-5.2%) (Target Exceeded)
	2006	-2%	54.38/10,000 (-1.1%) (Target Not Met)
4.4.4: The cost per capita of hospital admissions for upper GI bleeding among patients aged 65 to 84. *(Efficiency)*	*2011*	$88.82 per capita	Oct 31, 2011
	2010	$89.78 per capita	Oct 31, 2010
	2009	$90.75 per capita	$83.81 per capita (Target Exceeded)

Measure	FY	Target	Result
	2008	$91.71 per capita	$87.10 per capita (Target Met)
	2007	$92.68 per capita	$91.81 per capita (Target Met)
	2006	$93.64 per capita	$93.36 per capita (Target Met)

Measure	Data Source	Data Validation
4.4.3	HCUP	HCUP and QI Project Officers use established methodology to check data.
4.4.4	HCUP	HCUP and QI Project Officers use established methodology to check data.

Long-Term Objective 4: Achieve wider access to effective health care services and reduce health care costs.

Measure	FY	Target	Result
1.3.15: Cumulative number of partners contributing data to HCUP databases will exceed by 5% the FY 2000 baseline of 39. *(Output)*	*2011*	Increase # of partners providing data	Oct 31, 2011
	2010	Increase # of partners providing data	Oct 31, 2010
	2009	Increase # of partners providing data by 3	28 AS 27 ED
	2008	Increase # of partners contributing to HCUP databases	27 AS 25 ED (Target Met)
	2007	Increase # of partners contributing to HCUP databases	24 AS 22 ED (Target Met)
	2006	N/A	21 Ambulatory Surgery (AS) 17 Emergency Department (ED) (Target Met)

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. *(Outcome)*	*2011*	3 organizations	Oct 31, 2011
	2010	3 organizations	Oct 31, 2010
	2009	3 organizations	3 new organizations – Nevada State Hospital Association; Oklahoma State Hospital Association; Wisconsin State Hospital Association (Target Met)
	2008	3 organizations	5 new organizations - Kentucky Hospital Association; SSM Health Care; IN CHCS; Robert Wood Johnson; University Hospital (Target Met)
	2007	3 organizations	3 new organizations – CO Health Institute; OH Department of Health; Harvard Vanguard Medical Association & Atrias Health (Target Met)
	2006	3 organizations	3 new organizations - Organization for Economic Cooperation & Development; CT Office of Health Care Access; Dallas-Fort Worth Hospital Council (Target Met)
	2005	2 organizations	2 organizations (Target Met)

Measure	**Data Source**	**Data Validation**
1.3.15	HCUP database	HCUP Project Officer monitors the number of partners and reports by identifying the new data added to the existing baseline.
1.3.22	HCUP database	HCUP and QI Project Officers work with Project Contractors to monitor the field and collect specific information to validate the organizations’ use and outcomes.

Long-Term Objective 5: Assure that providers and consumers/patients use beneficial and timely health care information to make informed decisions/choices.

Measure	FY	Target	Result
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. *(Outcome)*	*2011*	Increase 46% over baseline (146 million)	Oct 31, 2011
	2010	Increase 46% over baseline (146 million)	Oct 31, 2010
	2009	Increase 44% over baseline (144 million)	41% (141 Million) (Target Not Met)
	2008	Increase 42% over baseline (142 million)	41% (141 Million) (Target Not Met)
	2007	Increase 40% over baseline (140 million)	41% (141 Million) (Target Met)
	2006	Increase baseline	138 Million (Target Met)

Measure	Data Source	Data Validation
1.3.23	CAHPS database National CAHPS Benchmarking Database	Prior to placing survey and related reporting products in the public domain, a rigorous development, testing, and vetting process with stakeholders is followed. Survey results are analyzed to assess internal consistency, construct validity, and power to discriminate among measured providers.

Medical Expenditure Panel Survey (MEPS)

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 inquires 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.

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.

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.

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

Measure	FY	Target	Result
1.3.16: Insurance Component tables will be available within months of collection. *(Output)*	*2011*	6	Oct 31, 2011
	2010	6	Oct 31, 2010
	2009	Set Baseline	6 (Target Met)
	2008	6	6 (Target Met)
	2007	6	6 (Target Met)
	2006	N/A	6 (Historical Actual)
1.3.17: MEPS Use and Demographic Files will be available months after final data collection. *(Output)*	*2011*	10.5	Oct 31, 2011
	2010	11	Oct 31, 2010
	2009	11	11 (Target Met)
	2008	11	11 (Target Met)
	2007	11	11 (Target Met)
	2006	N/A	11
1.3.18: Number of months after the date of completion of the MEPS data will be available. *(Output)*	*2011*	10.5 months	Oct 31, 2011
	2010	10.8 months	Oct 31, 2010
	2009	11 months	11 months (Target Met)
	2008	11 months	11 months (Target Met)
	2007	11 months	11 months (Target Met)
	2006	12 months	12 months (Target Met)

Measure	FY	Target	Result
1.3.19: Increase the number of topical areas tables included in the MEPS Tables Compendia (TC). *(Output)*	*2011*	Add additional variables to MEPS net	Oct 31, 2011
	2010	Add additional variables to MEPS net	Oct 31, 2010
	2009	Update State-level tables	Updated State Level Estimates (Target Met)
	2008	Add Prescribed Drug Tables	Prescribed Drug Tables Added (Target Met)
	2007	Add Insurance Tables	Insurance Tables Added (Target Met)
	2006	Add State Tables	State Tables Added (Target Met)
1.3.20: Increase the number of MEPS data users . Baseline FY 2005: 10 Data Center Projects (DCP), 15,900 TC, 13,101 Household Component/Insurance Component (HC/IC). *(Outcome)*	*2011*	Exceed baseline standard	Oct 31, 2011
	2010	Exceed baseline standard	Oct 31, 2010
	2009	Exceed baseline standard	41 DCP (Target Met)
	2008	Exceed baseline standard	41 DCP (Target Met)
	2007	Exceed baseline standard	23 DCP 19,989 TCP 14,809 HC/IC (Target Met)
	2006	Exceed Baseline standard	14 DCP 16,200 TCP 11,600 HC/IC (Target Met)
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. *(Outcome)*	*2011*	10.6 months	Oct 31, 2011
	2010	10.8 months	Oct 31, 2010
	2009	11 months	11 months (Target Met)
	2008	11 months	11 months (Target Met)
	2007	11 months	11 months (Target Met)
	2006	12 months	12 months (Target Met)
1.3.49: The average number of field staff hours required to collect data per respondent household for the	*2011*	12.7 hours	Oct 31, 2011
	2010	12.8 hours	Oct 31, 2010

Measure	FY	Target	Result
MEPS (at level funding). *(Annual Efficiency Measure)*	*2009*	13.0 hours	13.0 hours (Target Met)
	2008	13.5 hours	13.5 hours
	2007	Baseline	14.2 hours
	2006	N/A	N/A

Measure	Data Source	Data Validation
1.3.16	MEPS Web site	Data published on Web site
1.3.17 1.3.18 1.3.21	MEPS Web site	Monthly meetings with contractor, careful monitoring of field progress and instrument design, quality control procedures, including benchmarking with other national data sources.
1.3.19	MEPS Web site	Data published on Web site.
1.3.20	MEPS data: List of ongoing projects	Publications.
1.3.49		The number of field staff hours required to collect data per respondent household for the MEPS is logged by field staff in an automated system. Data quality and validation is monitored in several ways: 1) validation interviews are conducted for a sample of respondents, in which questions concerning the interview process are asked; 2) response rates are monitored to ensure that they stay high; and 3) the duration of interviews are tracked to ensure that interviewers are following proper protocol and not skipping questions during the interview.

Program Support

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.

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

Measure	FY	Target	Result
5.1.1: Improve AHRQ's strategic management of human capital *(Output)*	*2011*	Upon Department approval, fully implement the new HHS-wide automated performance management system	Oct 31, 2011
	2010	Fully comply with all Departmental procedures for HR management	Oct 31, 2010
	2009	Fully implement Departmental LMS for training and development needs	Complied with all Departmental procedures for HR management. Completed report on workforce needs and required skill sets. (Target Met)

Measure	FY	Target	Result
	2008	Develop core competencies for selected Agency staff and develop strategies for implementation	Core competencies developed and implementation strategies completed (Target Met)
	2007	Implement HHS Performance Improvement Initiative	Completed implementation of HHS Performance Improvement Initiative (Target Met)
	2006	Assess core competency and leadership models Identify strategies to infuse new talent into AHRQ	Completed assessment of core competency and leadership models Identified strategies to infuse new talent into AHRQ (Target Met)
5.1.2: Maintain a low-risk improper payment risk status *(Output)*	*2011*	Update the IPIA Risk Assessment of HCQO and continue to participate in the Department's A-123 Internal Control efforts	Oct 31, 2011
	2010	Complete updating of all internal controls following AHRQ's conversion to HCAS	Oct 31, 2010
	2009	Complete updating of all internal controls following AHRQ's conversion to the Uniform Financial Management System (UFMS)	Met all requirements for Department's A-123 Internal Control efforts (Target Met)
	2008	Complete all requirements related to OMB revised Circular A-123 Begin to update internal controls following AHRQ's conversion to UFMS	Requirements related to OMB revised Circular Continued to update internal controls (Target Met)
	2007	Continue to participate in Department A-123 Internal Control efforts	Continued to participate in Department A-123 Internal Control efforts (Target Met)
	2006	Participate in Department A-123 Internal Control efforts related to improper payments	Participated in Department A-123 Internal Control efforts related to improper payments (Target Met)
5.1.3: Expand E-government by increasing IT organizational capability *(Output)*	*2011*	Continue develop internal IT program management policies and procedures in line with guidance being issued by HHS	Oct 31, 2011

Measure	FY	Target	Result
	2010	Continue develop internal IT program management policies and procedures in line with guidance being issued by HHS	Oct 31, 2010
	2009	Continue develop internal IT program management policies and procedures in line with guidance being issued by HHS	SAS 70 Reviews, A-123 Reviews, and A-133 audits completed (Target Met)
	2008	Extend Project Management Office (PMO) operations and concepts to AHRQ IT investments	Ongoing (Target Met)
	2007	Develop fully integrated PMO with standardized processes and artifact	Ongoing (Target Met)
	2006	N/A	Completed level 3 maturity in EA as directed by HHS (Target Met)
5.1.4: Improve IT Security/Privacy Output *(Output)*	*2011*	Implement a FIPS 140-2 compliant email encryption solution	Oct 31, 2011
	2010	Fully implement FDCC and standard security configurations of all systems Implement FIPS 140-2 encryption solution on all systems to protect sensitive information	Oct 31, 2010
	2009	Integrate and align AHRQ's security program with HHS's Secure One security program	Integrated and aligned AHRQ's security program with HHS's Secure One security program (Target Met)
	2008	Certify and accredit all Level 3 information systems Review and update security program to reflect current guidance and mandates	Certified and accredited all Level 3 information systems Reviewed and updated security program (Target Met)
	2007	Certify and accredit all Level 2 information systems Begin implementation of Public Key Infrastructure with applications	Certified and accredited all Level 2 information systems Began implementation of Public Key Infrastructure with applications (Target Met)

Measure	FY	Target	Result
	2006	Perform required testing to insure maintenance and security level	Performed required testing to insure maintenance of security level (Target Met)
5.1.5: Establish IT Enterprise Architecture *(Output)*	*2011*	Comply with HHS EA requirements for FY 2011	Oct 31, 2010
	2010	Comply with HHS EA requirements for FY 2010	Oct 31, 2010
	2009	Comply with HHS EA requirements	Complied with EA activity set forth by HHS (Target Met)
	2008	Implement Level 3 EA plan Comply with EA activity as defined by HHS	Implemented Level 3 EA plan Continued to comply with EA activity set forth by HHS (Target Met)
	2007	Continue Level 3 EA plan	Completed Level 3 EA plan (Target Met)
	2006	N/A	Began work towards Level 3 maturity in EA as defined by HHS (Target Met)
5.1.6: Get to Green and maintain status for Performance *(Output)*	*2011*	Comply with HHS performance and budget integration requirements for 2011	Oct 31, 2011
	2010	Comply with HHS performance and budget integration requirements for 2010	Oct 31, 2010
	2009	Continue implementation of software within the portfolios	Completed implementation (Target Met)
	2008	Continue implementation of software within the portfolios	Continued implementation of software within the portfolios (Target Met)
	2007	Begin implementation of software within the portfolios of work to help facilitate budget and performance integration Conduct internal alignment of measures by strategic goal areas	Began to implement software with the portfolios Completed internal alignment of measures (Target Met)
	2006	N/A	Visual Performance Suite software designed and piloted (Target Met)

Measure	Data Source	Data Validation

Measure	Data Source	Data Validation
5.1.1	Departmental quarterly updates	As the beta site for the Department's Performance Management Appraisal Program (PMAP), AHRQ was required to complete the Performance Appraisal Assessment Tool (PAAT). Out of 100 total points possible, the Agency scored an 87 which, according to OPM, is considered as having "effectiveness characteristics present" – the highest level possible under this rating system.
5.1.2	Departmental quarterly updates; UFMS, IMPAC II, and Payment Management System	SAS 70 Reviews, A-123 reviews, and A-133 audits
5.1.3 5.1.4 5.1.5	Departmental quarterly updates	Compliance with Departmental standards
5.1.6	Departmental quarterly updates	Compliance with Departmental standards; AHRQ logic models and Portfolio plans

Agency Support of HHS Strategic Plan

The table below shows the alignment of AHRQ's strategic goals with HHS Strategic Plan goals.

HHS Strategic Goals	**AHRQ Goal 1:** Safety/Quality – Reduce the risk of harm from health care services by promoting the delivery of appropriate care that achieves the best quality outcome.	**AHRQ Goal 2:** Efficiency – Achieve wider access to effective health care service and reduce health care costs.	**AHRQ Goal 3:** Effectiveness – Assure that providers and consumers/patients use beneficial and timely health care information to make informed decisions/choices.
1 Health Care Improve the safety, quality, affordability and accessibility of health care, including behavioral health care and long-term care.			
1.1 Broaden health insurance and long-term care coverage.			
1.2 Increase health care service availability and accessibility.		✓	
1.3 Improve health care quality, safety and cost/value.	✓	✓	✓
1.4 Recruit, develop, and retain a competent health care workforce.	✓		✓
2 Public Health Promotion and Protection, Disease Prevention, and Emergency Preparedness Prevent and control disease, injury, illness and disability across the lifespan, and protect the public from infectious, occupational, environmental and terrorist threats.			
2.1 Prevent the spread of infectious diseases.			
2.2 Protect the public against injuries and environmental threats.			
2.3 Promote and encourage preventive health care, including mental health, lifelong healthy behaviors and recovery.	✓		
2.4 Prepare for and respond to natural and man-made disasters.			
3 Human Services Promote the economic and social well-being of individuals, families, and communities.			
3.1 Promote the economic independence and social well-being of individuals and families across the lifespan.			

HHS Strategic Goals	**AHRQ Goal 1:** Safety/Quality – Reduce the risk of harm from health care services by promoting the delivery of appropriate care that achieves the best quality outcome.	**AHRQ Goal 2:** Efficiency – Achieve wider access to effective health care service and reduce health care costs.	**AHRQ Goal 3:** Effectiveness – Assure that providers and consumers/patients use beneficial and timely health care information to make informed decisions/choices.
3.2 Protect the safety and foster the well being of children and youth.			
3.3 Encourage the development of strong, healthier and supportive communities.			
3.4 Address the needs, strengths and abilities of vulnerable populations.			
4 Scientific Research and Development Advance scientific and biomedical research and development related to health and human services.			
4.1 Strengthen the pool of qualified health and behavioral science researchers.			✓
4.2 Increase basic scientific knowledge to improve human health and human development.			
4.3 Conduct and oversee applied research to improve health and well-being.	✓		✓
4.4 Communicate and transfer research results into clinical, public health and human service practice.	✓	✓	

Full Cost Table

HHS Strategic Goals and Objectives	**FY 2009**	**FY 2010**	**FY 2011**
1 Health Care Improve the safety, quality, affordability and accessibility of health care, including behavioral health care and long-term care. (Total)	$307.000	$332.000	$234.000
1.1 Broaden health insurance and long-term care coverage.	$.000	$.000	$.000
1.2 Increase health care service availability and accessibility.	$11.000	$11.000	$12.000
1.3 Improve health care quality, safety and cost/value.	$295.000	$320.000	$221.000
1.4 Recruit, develop, and retain a competent health care workforce.	$1.000	$1.000	$1.000
2 Public Health Promotion and Protection, Disease Prevention, and Emergency Preparedness Prevent and control disease, injury, illness and disability across the lifespan, and protect the public from infectious, occupational, environmental and terrorist threats. (Total)	$7.000	$7.000	$8.000
2.1 Prevent the spread of infectious diseases.	$.000	$.000	$.000
2.2 Protect the public against injuries and environmental threats.	$.000	$.000	$.000
2.3 Promote and encourage preventive health care, including mental health, lifelong healthy behaviors and recovery.	$7.000	$15.904	$15.904
2.4 Prepare for and respond to natural and man-made disasters.	$.000	$.000	$.000
3 Human Services Promote the economic and social well-being of individuals, families, and communities. (Total)	$.000	$.000	$.000
3.1 Promote the economic independence and social well-being of individuals and families across the lifespan.	$.000	$.000	$.000
3.2 Protect the safety and foster the well being of children and youth.	$.000	$.000	$.000
3.3 Encourage the development of strong, healthier and supportive communities.	$.000	$.000	$.000
3.4 Address the needs, strengths and abilities of vulnerable populations.	$.000	$.000	$.000
4 Scientific Research and Development Advance scientific and biomedical research and development related to health and human services. (Total)	$58.053	$49.141	$365.000
4.1 Strengthen the pool of qualified health and behavioral science researchers.	$12.000	$12.000	$28.000
4.2 Increase basic scientific knowledge to improve human health and human development.	$.000	$.000	$.000
4.3 Conduct and oversee applied research to improve health and well-being.	$16.000	$16.000	$271.000
4.4 Communicate and transfer research results into clinical, public health and human service practice.	$30.053	$21.114	$62.008
Agency Total	$372.053	$397.053	$610.912

Summary of Findings and Recommendations for Completed Program Evaluations

Currently, AHRQ is undergoing a review that will evaluate the Agency's portfolios measures and the progress that each portfolio is making towards achieving annual and long-term goals and objectives. This work entails assessing and refining current portfolio measures as well as developing new measure and identifying data sources for all measures.

The objective is to provide the information needed to better target and improve AHRQ’s activities in order to improve the quality, safety, efficiency and effectiveness of health care. Based on the results of the portfolio measures evaluation, current measures shall be refined and, where needed, additional portfolio measures shall be developed.

Discontinued Performance Measures

#	Key Outcomes/ Outputs	FY 2006 Actual	FY 2007 Actual	FY 2008 Actual	FY 2009 Target	FY 2009 Actual
1.3.6	Increase physician adoption of Electronic Health Records (EHRs)	21.9% of physician practices use e-prescribing	24.9%	Increase 20% from baseline	38.4% (NCHS 4-8/08 survey – full or partial EMR systems)	Increase 25% from Baseline
1.3.8	Most Americans will have access to and utilize a Personal Health Record (PHR)	Partnered with CMS on PHR technology	Partnered with CMS on PHR technology	Develop tool to assess consumer perspectives on the use of personal EHRs	Developed and deployed tool to assess perspectives of Medicare beneficiaries on using PHRs (as part of Medicare PHR Demonstration Project)	10 organizations will use tools to assess consumer perspectives on the use of personal EHRs
1.3.9	Engineered clinical knowledge will be routinely available to users of EHRs	Initiated standards development and adoption of engineered clinical knowledge	CCHIT certification criteria includes clinical decision support	Award two projects that will deliver best practice recommendations to key stakeholders to create engineered clinical knowledge	Awarded two contracts totaling $5M to support the development, adoption, implementation, and evaluation of best practices using clinical decision support	Two projects will deliver best practice recommendations to create engineered clinical knowledge
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	NA	NA	124 million people	124 million people	124 million people
1.3.28	Increase the number of Chartered Value Exchanges (CVEs)	NA	NA	25	30	30

2.3.4	Increase the percentage of men and women age 50 or older who report having been screened for colorectal cancer	NA	NA	Evidence report and decision analysis completed. Evidence report and decision analysis on CRC submitted to Annals of Internal Medicine Situational analysis for screening for CRC completed and disseminated AHRQ staff participated as full members of the Colorectal Cancer Roundtable	Release updated USPSTF recommendation on screening for CRC Finalize modification of ACS colorectal screening implementation toolkit (via IAA with CDC) to electronic format	The USPSTF recommendation on Screening for Colorectal Cancer was published on Oct 7, 2008, in the *Annals of Internal Medicine* early online release and in print on November 4, 2008. *How to Increase Colorectal Cancer Screening Rates in Practice: Primary Care Clinicians Toolbox and Guide* was posted on the National Colorectal Cancer Roundtable's Web site (http://www.nccrt.org/Documents/General/IncreaseColorectalCancerScreeningRates.pdf.) In FY 2009, AHRQ also supported an evaluation of the tool including feedback from clinicians using the Guide.

2.3.5	Increase rates of additional Portfolio-prioritized clinical preventive service(s) by issuing a work plan for additional preventive services	NA	NA	Solicitation for nominations for new topics published in the Federal Register 02/20/08 The USPSTF prioritized four topics for potential review Portfolio prioritized clinical preventive service: Counseling to Promote a Healthy Lifestyle (Healthy Diet and Physical Activity)	Finalize work plan for an EPC evidence report and dissemination & implementation situational analysis for additional Portfolio-prioritized clinical preventive service(s)	In April 2009, the Oregon EPC submitted a final work plan for conducting two evidence reports on counseling to promote physical activity and a healthy diet. The peer-reviewed work plan has been approved by AHRQ and the USPSTF. A dissemination & implementation situational analysis was completed (Sept 30, 2009) on counseling to promote physical activity and a health diet in primary care settings.
2.3.6	Improve integration of Prevention and Care Management activities	NA	NA	20 grants awarded to support "Optimizing Prevention & Healthcare Management in Complex Patients	Convene grantees investigating improving clinical services for complex patients to enhance methodological work	Launched new Prevention/Care Management Portfolio and begin development of key outcome measures for Care Management

Disclosure of Assistance by Non-Federal Parties

The preparation of Annual Performance Reports and Annual Performance Plans is an inherently governmental function that is only to be performed by Federal Employees. As applicable, your agency should include a section disclosing any material assistance received from non-Federal parties in the preparation of the FY 2011 Online Performance Appendix.