

# AHRQ 2011 Annual Highlights



Agency for Healthcare Research and Quality  
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# Agency for Healthcare Research and Quality (AHRQ) 2011 Annual Highlights



## Mission

As 1 of 12 agencies within the Department of Health and Human Services (HHS), the mission of AHRQ is to improve the quality, safety, efficiency, and effectiveness of health care for all Americans. The Agency fulfills this mission by producing information that:

- Reduces the risk of harm from health care services by using evidence-based research and technology to promote the delivery of the best possible care.
- Transforms the practice of health care to achieve wider access to effective services and reduce unnecessary health care costs.
- Improves health care outcomes by encouraging providers, consumers, and patients to use evidence-based information to make informed treatment decisions.

Ultimately, the Agency achieves its goals through translating research into improved health care practice and policy. Health care providers, patients, policymakers, payers, administrators, and others use AHRQ research findings to improve health care quality, accessibility, and outcomes of care.

Disseminating AHRQ's research findings helps support a Nation of healthier, more productive people and results in an enhanced return on the Nation's substantial investment in health care. This report highlights some of the Agency's key accomplishments, initiatives, and research findings during fiscal year 2011 (FY11).

## Reducing the risk of harm

Through its research on quality and patient safety, in FY11 AHRQ developed tools, resources, and research that show how health care professionals can improve the quality and safety of the health care services they provide and reduce medical errors.

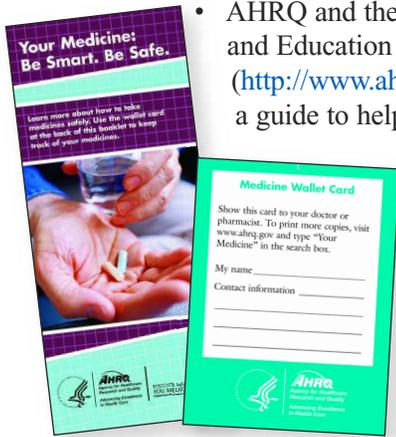
## Tools and Resources

- A new guide -- *Training Guide: Using Simulation in TeamSTEPPS® Training* (<http://www.ahrq.gov/teamsteppstools>) -- integrates teamwork, interpersonal, and communication skills into simulation-based training. It offers strategies and tools that can improve team performance and enhance patient safety.
- AHRQ's first report on nursing home safety culture -- *Nursing Home Survey on Patient Safety Culture: 2011 User Comparative Database Report* -- (<http://www.ahrq.gov/qual/nhsurvey11>) offers a comparative assessment of 16,155 staff responses from 226 U.S. nursing homes to AHRQ's Nursing Home Survey on Patient Safety Culture (<http://www.ahrq.gov/qual/patientsafetyculture/nhsurvindex.htm>).

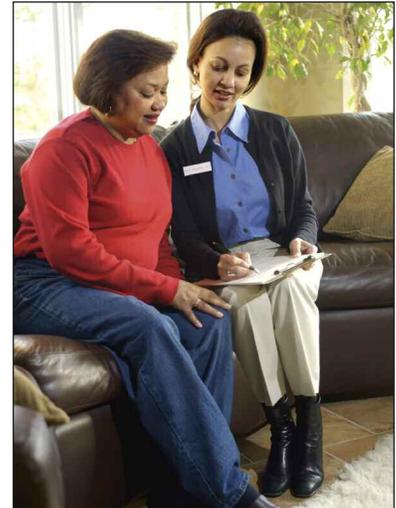


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- New Common Formats (<http://www.pso.ahrq.gov>) for patient safety reporting in skilled nursing facilities complement an existing set of Common Formats, Version 1.1, which are designed to help health care providers collect both generic and event-specific information about incidents, near misses or close calls, and unsafe conditions in hospital settings.



- AHRQ and the National Council on Patient Information and Education released *Your Medicines: Be Smart. Be Safe* (<http://www.ahrq.gov/consumer/safemeds/yourmeds.htm>), a guide to help patients learn more about how to take medicines safely. The guide includes a detachable, wallet-sized card that can be personalized to help patients keep track of all medicines they are taking, including vitamins and herbal and other dietary supplements.



## Eliminating central line-associated bloodstream infections

Intensive care units (ICUs) in both large and small hospitals eliminated central line-associated bloodstream infections for up to 2 years after using a targeted quality improvement initiative funded in part by AHRQ. The initiative, known as the Comprehensive Unit-based Safety Program, or CUSP ([www.ahrq.gov/qual/cusp.htm](http://www.ahrq.gov/qual/cusp.htm)), was implemented through the Keystone Intensive Care Unit Project in Michigan hospitals. (See "The Ability of Intensive Care Units to Maintain Zero Central Line-Associated Bloodstream Infections" by Allison Lipitz-Snyderman, Ph.D., Dale M. Needham, F.C.A., M.D., Ph.D., Elizabeth Colantuoni, Ph.D., and others, in the May 9, 2011 *Archives of Internal Medicine* 171(9), pp. 856-858.)

## Public reports on provider performance

AHRQ released the Public Reporting Web Page (<http://www.ahrq.gov/path/publicreporting.htm>) featuring resources on public reporting of provider performance information for consumers. The resources include:

- MONAHRQ®, innovative software for creating a public report developed by AHRQ;
- a sampler of model public report elements;
- a comprehensive guide for public report card sponsors;
- and a decision guide for report card developers about selecting quality of care and resource use measures, as well as other tools and reports on public reporting.



### Identifying medical errors

Researchers looked at 6,749 medication error reports from neonatal intensive care units in 163 health care facilities and found:

- 72 percent of errors that reached the patient did not result in harm
- 4 percent of actual errors resulted in permanent harm or death.
- 48.2 percent of all reported medication errors occurred during the drug administering phase, followed by drug transcribing/documenting, prescribing, and dispensing.
- 26.9 percent of all error types cited involved improper dose or quantity, 18.6 percent were omission errors, and 17.6 percent were wrong timing.

(See "NICU medication errors: Identifying a risk profile for medication errors in the neonatal intensive care unit," by Theodora A. Stavroudis, M.D., Andrew D. Shore, Ph.D., Laura Morlock, Ph.D., and others in the *Journal of Perinatology* 30, pp. 459-468, 2010.)

### Improving pregnancy warnings

Researchers interviewed 132 women at outpatient care clinics and found that 94 percent of the women were able to understand the message of the enhanced text -- "Do not use if you are pregnant, think you are pregnant, or breast feeding" -- when it accompanied an icon that was a silhouette of a pregnant woman with a slash through it. In contrast, just 76 percent of women comprehended the standard label and 79 percent understood the enhanced text alone. (See "Improving pregnancy drug warnings to promote patient comprehension," by Whitney B. You, M.D., William Grobman, M.D., M.B.A., Terry Davis, Ph.D., and others in the April 2011 *American Journal of Obstetrics and Gynecology*, 204(4), pp. 318.e1-318.e5.)

### Healthcare 411

Healthcare 411 (<http://healthcare411.ahrq.gov/>) is an audio podcast series produced by AHRQ. Using the latest technology, AHRQ shares news and information in the form of concise 60-second audio news programs that feature current research on important health care topics. Healthcare 411 gives consumers information they can use in their health care decision making.

**50+: New and Improved**—Two updated checklists are designed to help men and women over 50 stay healthy.

**Treating High Cholesterol**—Managing high cholesterol with diet, exercise, and medicine helps lower cholesterol levels.

**Questions are the Answer**—When patients and their caregivers communicate well, care is better.

**AHRQ's Spanish-language Materials**—In addition to tools about preventive care, a growing array of videos, guides and pamphlets address specific health conditions.

**Why You Need to Explore Your Treatment Options**—Finding the best treatment option can make a major difference in your health and well-being.

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## **TeamSTEPPS improves teamwork, communication, and attitudes**

IFMC, the Medicare Quality Improvement Organization (QIO) for Iowa, uses "Team Strategies and Tools to Enhance Performance and Patient Safety" (TeamSTEPPS®), with Covenant Medical Center and Sartori Memorial Hospital to improve patient safety by enhancing teamwork and communication.

*Kelli Vellinga, RN, BSN,*

A Collaboration Specialist with IFMC and a TeamSTEPPS master team trainer, Vellinga uses the TeamSTEPPS tools to assist hospitals working on surgical care improvement to reduce surgical infections and complications.

"TeamSTEPPS has a lot of tools, and we try to customize the approach based on the providers' needs. After conducting my assessment and on-site observation, I assist teams in developing a customized plan to improve the quality and safety of care. As an outsider, I can be a change catalyst," says Vellinga.

*Kathy Eisenman, RN,*

Covenant Medical Center and Sartori Memorial Hospital,

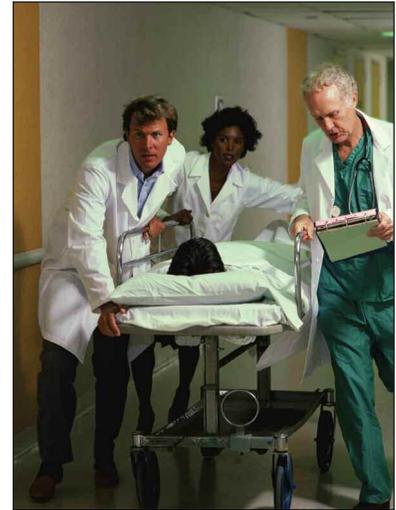
As the Surgical Services Manager at Sartori Memorial Hospital, Eisenman works with Vellinga to implement TeamSTEPPS. "We learned the effect TeamSTEPPS can have on patient safety, and we talked about debriefs, huddles, and trying to communicate better," she says. "We took baby steps at first trying to get it going—we picked out a few tools from the program like CUS ('I'm concerned, uncomfortable, this is a safety issue'), handoffs, briefing, and debriefing. We also tried to stress the environment of collaboration, and that it's okay to speak up in order to change the culture of safety."

*Marcia Dlouhy, RN, BS,*

Dlouhy is the Director of Surgical Services for Covenant Medical Center and Sartori Memorial Hospital. Dlouhy says the hospitals' national surgical care infection prevention measures have significantly improved. "Our data show we are ranking much better now than before we introduced TeamSTEPPS. We're spreading this to the other departments, too. It isn't just happening with the surgical teams."

Eisenman agrees that the results of the improved communications TeamSTEPPS creates are far-reaching. Improvements in the hospital's scores on national surgical care safety measures that reduce the incidence of surgical complications are being attributed directly to TeamSTEPPS tools.

In addition, Eisenman says that her teams' attitudes about patient safety have changed because of the TeamSTEPPS program. "At first it was to meet the mark; now it is because we want zero complications and infections. All the units are committed to the TeamSTEPPS process."





### AHRQ Quality Indicators

AHRQ has developed an array of health care decision making and research tools that can be used by program managers, researchers, and others at the Federal, State and local levels. The Quality Indicators (QIs) (<http://www.qualityindicators.ahrq.gov/>) are measures of health care quality that make use of readily available hospital inpatient administrative data. The QIs can be used to highlight potential quality concerns, identify areas that need further study and investigation, and track changes over time. The current AHRQ QI modules represent various aspects of quality:

- Prevention Quality Indicators identify hospital admissions in geographic areas that evidence suggests may have been avoided through access to high-quality outpatient care.
- Inpatient Quality Indicators reflect quality of care inside hospitals, as well as across geographic areas, including inpatient mortality for medical conditions and surgical procedures.
- Patient Safety Indicators reflect quality of care inside hospitals, as well as geographic areas, to focus on potentially avoidable complications and iatrogenic events.
- Pediatric Quality Indicators use indicators from the other three modules with adaptations for use among children and neonates to reflect quality of care inside hospitals, as well as geographic areas, and identify potentially avoidable hospitalizations.

The AHRQ QIs are used in free software distributed by AHRQ. The software can be used to help hospitals identify quality of care events that might need further study. The software programs can be applied to any hospital inpatient administrative data. These data are readily available and relatively inexpensive to use.



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## Transforming the practice of health care

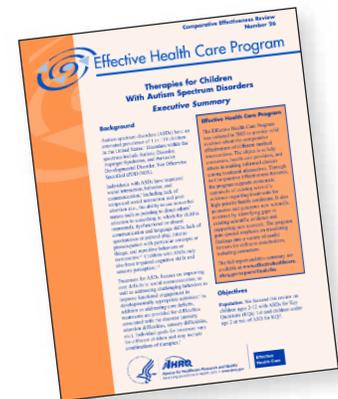
AHRQ evaluates the benefits and harms of different health care interventions and ways to deliver health care that provides the most appropriate treatment for an illness or condition. The Agency collects data and provides tools and resources to help measure and assess the nation's health, health care services, and the costs of those services. These efforts help to inform both clinicians and consumers to make the best decisions they can about health care.

## Tools and Resources

### Effective Health Care Program

In FY11, the Effective Health Care Program (<http://effectivehealthcare.ahrq.gov/>) released comparative effectiveness research reviews, original research findings, and summary guides for clinicians and patients. Topics included osteoarthritis, antipsychotic drugs, depression, sleep apnea, hypertension, pain management, health literacy, fetal surgery, autism, and diabetes. For example:

- Treatment for autism spectrum disorders - two commonly used medications—risperidone and aripiprazole—show benefit in reducing emotional distress, aggression, hyperactivity, and self-injury. However, these medicines are associated with significant side effects, such as rapid weight gain and drowsiness.
- Off-label use of antipsychotic drugs – some evidence supports the off-label use of atypical antipsychotic medications such as the use of risperidone, olanzapine, and aripiprazole to treat symptoms of dementia; quetiapine to treat generalized anxiety disorder; and risperidone to treat obsessive-compulsive disorder. However, evidence was lacking to justify the use of these and other atypical antipsychotic drugs to treat substance abuse problems, eating disorders, or insomnia.
- Options to treat sleep apnea - continuous positive airway pressure machine is highly effective in improving sleep and related symptoms of obstructive sleep apnea by improving airflow. Another treatment, a mouthpiece called a mandibular advancement device, can also be very effective.



### Consumer resources

- *Guía para pacientes que están en tratamiento de una cardiopatía coronaria estable ("ACE Inhibitors" and "ARBs" to Protect Your Heart?)—A Guide for Patients Being Treated for Stable Coronary Heart Disease* (<http://effectivehealthcare.ahrq.gov/index.cfm/informacion-en-espanol/>), is a free, illustrated easy-to-read pamphlet that compares drugs for preventing heart attacks, heart failure or strokes in people with stable coronary heart

disease. The guide summarizes the benefits and risks of medications that help reduce blood pressure in patients who often take other heart-related medications such as aspirin, blood thinners, or cholesterol-lowering drugs. This new Spanish-language guide on heart medications is part of AHRQ's ongoing effort to give Hispanics the knowledge they need to take a greater role in their health care.

- *Conozca las preguntas, (Know the Questions)* a new, multimedia Spanish-language campaign by AHRQ and the Ad Council, encourages Hispanics to get more involved in their health care and to talk with their doctors about their medical concerns. The national public service advertising campaign, which features television, radio, print and Web ads, offers tips to help Hispanics prepare for medical appointments by thinking ahead of time about questions to ask their doctors during medical appointments.

### Data and Surveys

AHRQ's Healthcare Cost and Utilization Project (HCUP)

(<http://www.ahrq.gov/data/hcup/>) collects data that allows us to conduct research on a broad range of health policy issues, including cost and quality of health services, medical practice patterns, access to health care programs, and outcomes of treatments at the national, State, and local market levels. In FY11, AHRQ released the following updates to HCUP databases:

- The Kid's Inpatient Database (KID) featuring 2009 data, which is the only national dataset on hospital use, outcomes, and charges designed to study children. Data elements include diagnoses and procedures, patient characteristics, hospital characteristics, source of admission, charges, and expected payer.
- The Nationwide Inpatient Sample (NIS) featuring 2009 data, which is the largest all-payer inpatient care database in the United States and is updated annually. The data can be weighted to produce national estimates, allowing researchers and policymakers to use it to identify, track, and analyze national trends in health care use, access, charges, quality, and outcomes.

Data from the Kids' Inpatient Database and Nationwide Inpatient Sample show that influenza increased dramatically as a major cause of hospitalizations for children age 17 and under, climbing from 65th in 2000 in the ranking of reasons why children go to the hospital to 10th in 2009. Pneumonia, asthma, and acute bronchitis were the most common conditions that required hospital care in 2009, followed by mood disorders (depression and bipolar disorder). Children represented one out of every six hospital stays, and total hospital charges for children were \$33.6 billion, or 9 percent of total hospital costs in 2009. (See Statistical Brief #118: *Hospital Stays for Children, 2009*.)



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Data from the 2008 Nationwide Inpatient Sample show that U.S. community hospitals billed insurance companies and Federal and State programs \$1.2 trillion in 2008 for inpatient care. This represents a 28 percent increase over the \$900 billion, adjusted for inflation, billed in 2004. Total charges billed to Medicare (\$534 billion) and Medicaid (\$159 billion) accounted for about 60 percent of all charges in 2008. Private insurers were charged \$373 billion, or 32 percent of the total. The uninsured accounted for \$48 billion, or 5 percent of the national bill. (See *The National Bill: The Most Expensive Conditions by Payer*, 2008 (<http://www.hcup-us.ahrq.gov/reports/statbriefs/sb107.jsp>).

AHRQ's Medical Expenditure Panel Survey (MEPS) (<http://www.meps.ahrq.gov/mepsweb/>) is a detailed source of information on the health services used by Americans, the frequency with which they are used, the cost of those services, and how they are paid for.



- In FY11, MEPS released data files for 2009 population characteristics, jobs, health insurance, medical visits, dental visits, expenses, medical conditions, and prescribed medicines.
- MEPS is an important data source to inform health care policy decisionmaking at the State and national levels. In FY11, congressional and Executive Branch analysts requested MEPS data on health insurance, costs of coverage, expenditures, preventive care, mental illness, and the uninsured (<http://www.ahrq.gov/data/mreqahi.htm>). Table 1 provides a sample of the responses provided to specific requests in FY11.
- An analysis of MEPS data showed that insurers and consumers spent \$52.2 billion on prescription drugs in 2008 for outpatient treatment of metabolic conditions such as diabetes and elevated cholesterol. Purchases of metabolic drugs by adults aged 18 and older accounted for 22 percent of the nearly \$233 billion spent overall to buy prescription medicines that year. Central nervous system drugs, used to relieve chronic pain and control epileptic seizures and Parkinson's Disease tremors cost \$35 billion while cardiovascular drugs, including calcium channel blockers and diuretics cost \$29 billion. (See Statistical Brief #313, *Expenditures for the Top Five Classes of Outpatient Prescription Drugs, Adults Ages 18 and Older*, 2008.)



## MONAHRQ 2.0

(<http://www.monahrq.ahrq.gov>) is a unique, desktop, Windows®-based software application for developing Web sites for hospital quality public reporting or research use. MONAHRQ

gives users the ability to report the Centers for Medicare & Medicaid Services' (CMS) Hospital Compare measure results along with, or instead of, their own inpatient discharge data. Web sites created with MONAHRQ 2.0 provide information in four areas: quality of care for specific hospitals; provision of services by hospitals for health conditions and procedures; potentially avoidable hospitalizations; and rates of health conditions and procedures.



**Table 1 – MEPS responses to request for assistance on health initiatives for FY11**

<b>Source of Request</b>	<b>Assistance Provided</b>
Congressional Budget Office	National estimates of private and government sector health insurance enrollment, eligibility, and other measures, by industry.
Assistant Secretary for Planning and Evaluation, HHS	<p>Estimates for coverage, expenditures, and preventive care utilization for use on a paper that would be published on the second anniversary of the CHIPRA reauthorization.</p> <p>“Rush” assistance with estimates on how many individuals: (a) have a mental illness; (b) do not speak English as a first language; or (c) are not citizens.</p> <p>Technical assistance and estimates for the Health System Tracking Project.</p>
Office of Health Reform, HHS	Technical assistance on the use of preventive care by the uninsured.
Council of Economic Advisors	Data covering topics such as the capacity for large-scale surveys to collect the data that will be needed to evaluate key provisions of health reform, and changes that could be made now that would improve evaluation capacity.
Office of Management and Budget (OMB)	A seminar for OMB colleagues to enable them to better understand AHRQ simulation models and related research on projecting expenditures. The purpose of the seminar was to help OMB develop its own microsimulation capacity.
Office of Health Reform, HHS	Estimates for medical expenditures and out-of-pocket costs for the uninsured.

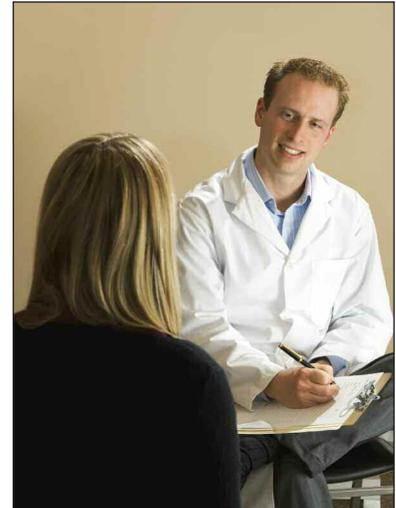
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## Health IT

Workflow Assessment for Health IT is a new toolkit that assists small- and medium-sized practices in workflow analysis and redesign before, during, and after health information technology (IT) implementation. The toolkit includes tools to analyze workflow, examples of workflow analysis and redesign, and others' experiences with health IT and workflow.

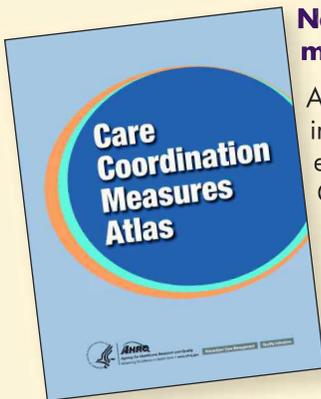
## Using antibiotics more effectively

Researchers at the University of Pennsylvania School of Medicine's Center for Education and Research on Therapeutics found that implementing electronic order sets that adhere to the Centers for Disease Control and Prevention guidelines for antibiotic use after surgery was effective in raising the percentage of patients whose antibiotics were stopped appropriately after surgery. The hospital that integrated the electronic order set in its computerized provider order entry system saw timely discontinuation of antibiotics rise from 36.8 percent of patients to 55.7 percent. (See "Effectiveness of an information technology intervention to improve prophylactic antibacterial use in the postoperative period," by Kevin Haynes, Pharm.D., M.S.C.E., Darren R. Linkin, M.D., M.S.C.E., Neil O. Fishman, M.D., and others in the March 2011 *Journal of the American Medical Informatics Association* 18(2), pp. 164-168.)



## Enabling Medication Management Through Health Information Technology

This new evidence report, available at (<http://www.ahrq.gov/clinic/tp/medmgtp.htm>), examines the impact—clinical, economic, and effectiveness—of health IT applications on medication management. The review found that health IT-enabled applications, especially clinical decision support and computerized physician order entry systems, showed evidence of improved



### New resource identifies care coordination measures

AHRQ released a new resource for researchers interested in measuring care coordination, an emerging field of quality measurement. The Care Coordination Measures Atlas (<http://www.ahrq.gov/qual/careatlas>) identifies more than 60 measures for assessing care coordination that include the perspectives of patients and caregivers, health care professionals, and health system managers. To help users easily identify measures that are

relevant to their work, the measures are mapped to a conceptual framework for understanding care coordination measurement. Researchers, measure developers, accountable care organizations, and others responsible for measuring care coordination will find the atlas useful in identifying currently available measures to assess care coordination activities, as well as gaps in existing measures that can be addressed in future work.



care processes. The real-life cost of implementing electronic health records (EHRs) in an average five-physician primary care practice, operating within a large physician network committed to network-wide implementation of electronic health records, is about \$162,000 with an additional \$85,500 in maintenance expenses during the first year. (See "The financial and nonfinancial costs of implementing electronic health records in primary care practices," by Neil S. Fleming, Ph.D., Steven D. Culler, Ph.D., Russell McCorkle, M.B.A., and others in the March 2011 *Health Affairs* 30(3), pp. 481-489.)

### Helping consumers choose health care plans

The Hawaii Department of Human Services uses the Consumer Assessment of Healthcare Providers and Systems (CAHPS®, <https://www.cahps.ahrq.gov/>) to collect and report patients' experience with their managed health care plans.

Anthea Wang, MD, MPH, Medical Director for the Med-Quest Division of the Hawaii Department of Human Services, is a member of the AHRQ-sponsored Medicaid Medical Directors' Learning Network, an AHRQ Knowledge Transfer Project. Though the CAHPS survey had been used since 2007 to better understand patient care experiences, she decided to use the survey findings for public reporting and pay-for-performance initiatives. She finds that the CAHPS Health Plan Survey's prescriptive instructions reduce the likelihood of bias and error.

Wang reports that a consumer guide—based on the adult CAHPS Health Plan Survey results, along with selected National Committee for Quality Assurance's Healthcare Effectiveness Data and Information Set measures—was developed and published on the Hawaii Department of Human Services Web site. The guide presents a side-by-side comparison of the performance of the various health plans in a way that is transparent and easily understood by users. Health plan members can use this information to choose plans that provide high quality care for themselves and their families.

The consumer guide was sent to patients for open enrollment and is posted at <http://www.med-quest.us/ManagedCare/consumerguides.html>.

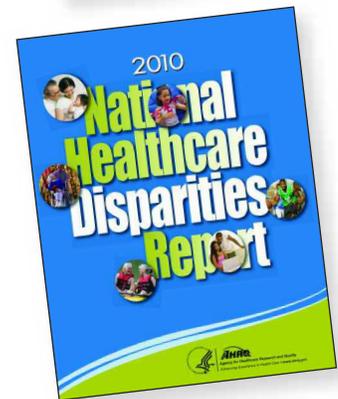
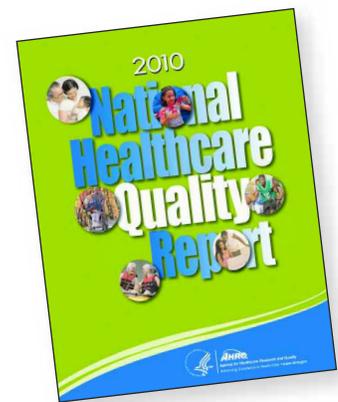
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## Improving health care outcomes

Improvements in health care quality continue to progress at a slow rate – about 2.3 percent a year; however, disparities based on race and ethnicity, socioeconomic status and other factors persist at unacceptably high levels. To help the nation address these disparities, AHRQ collects data and reports on its findings through the *National Healthcare Quality Report* and *National Healthcare Disparities Report*. Through its research projects, the Agency also develops tools and resources that health care providers can use in order to improve outcomes in the health care they provide.

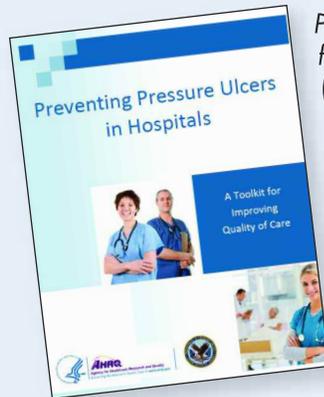
## Tools and Resources

- The National Healthcare Quality and Disparities Reports (<http://www.ahrq.gov/qual/qdr10.htm>) show trends by measuring health care quality for the Nation using a group of measures such as effectiveness, patient safety, timeliness, patient-centeredness, care coordination, efficiency, health system infrastructure, and access. The 2010 reports show:
  - Gains in health care quality were seen in a number of areas, with the highest rates of improvement in measures related to treatment of acute illnesses or injuries. For example, the proportion of heart attack patients who underwent procedures to unblock heart arteries within 90 minutes improved from 42 percent in 2005 to 81 percent in 2008.
  - Blacks, American Indians, and Alaska Natives received worse care than whites for about 40 percent of core measures. Asians received worse care than whites for about 20 percent of core measures. Hispanics received worse care than whites for about 60 percent of core measures. Poor people received worse care than high-income people for about 80 percent of core measures.
  - On average, Americans report barriers to care one-fifth of the time, ranging from 3 percent of people saying they were unable to get or had to delay getting prescription medications to 60 percent of people saying their usual provider did not have office hours on weekends or nights.
- The report, *Promoting Safety and Quality Through Human Resources Practices* (<http://www.ahrq.gov/qual/prosafetysum.htm>), examines the growing support for a link between innovative human resources staffing patterns and improvements in safety and quality in health care settings. Key findings included:
  - the importance of engaging staff with an organization's mission, vision, goals, and objectives;
  - empowering frontline staff;
  - hiring and placing staff based on competencies and organizational fit, rather than just on formal training;





- holding leaders accountable for organizational objectives;
- and using a high-performance organizing framework, such as Six Sigma or Lean production to clarify the link with quality and safety outcomes. A tool derived from this project, *Using Workforce Practices to Guide Quality Improvement: A Guide for Hospitals*, is available at <http://www.ahrq.gov/qual/workforceguide.htm>.



*Preventing Pressure Ulcers in Hospitals: A Toolkit for Improving Quality of Care* (<http://www.ahrq.gov/research/ltc/pressureulcertoolkit>) is a Web-based resource that can assist hospital staff in implementing effective pressure-ulcer prevention practices through an interdisciplinary approach to care. The tools outline a step-by-step hospital-based initiative to target interventions in those areas where patient care processes have shown the most risks to patient skin integrity.

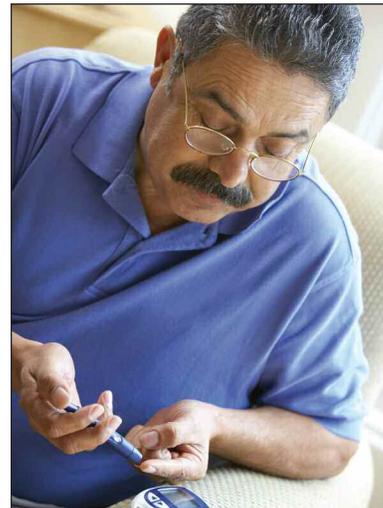
### **Collaboration to improve care in underserved areas**

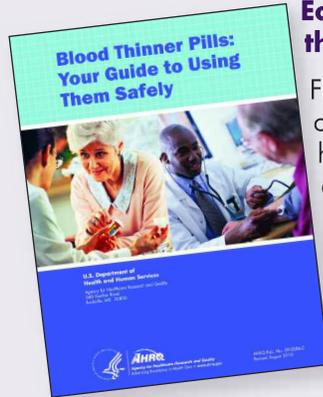
To bring effective treatment to persons with the Hepatitis C virus (HCV) infection in underserved areas, researchers at the University of New Mexico Health Sciences Center developed a model called Extension for Community Healthcare Outcomes, or ECHO, that brings state-of-the-art medical knowledge to primary care providers and nurses. Using videoconference or teleconference lines, community-based medical teams, including physicians and nurses, take part in weekly clinics with specialists. Together, they discuss patients' medical history, review lab results and other key findings and collaborate on treatment plans using evidence-based treatment approaches. They found that the HCV infection was cured at a similar rate for patients who were treated at these community-based settings as patients who were treated at the university clinic (58.2 percent vs. 57.5 percent). (See "Outcomes of treatment for hepatitis C virus infection by primary care providers," by Sanjeev Arora, M.D., Karla Thornton, M.D., Glen Murata, M.D., and others in the June 9, 2011 *New England Journal of Medicine*, 364(23):2199-207.)

# 2011 Annual Highlights

## Empowering patients with self-management of diabetes

Delivery of effective self-management education and support can be difficult in traditional primary care, but a new study shows that structured goal-setting approaches to diabetes self-management can significantly reduce hemoglobin A1c (HbA1c, an indicator of blood-glucose levels). The researchers tested two alternative diabetes clinic approaches in 87 older veterans with treated, but uncontrolled, diabetes (HbA1c of 7 percent or higher). Patients who participated in the structured goal-setting approach known as “Empowering Patients in Care” (EPIC), had significantly greater improvements in HbA1c immediately following the active intervention compared to the education-usual care group. These differences persisted at the 1 year follow-up. The EPIC approach trained patients to integrate their health care providers' treatment plans into collaborative self-management goals and action plans. (See "Comparative effectiveness of goal setting in diabetes mellitus group clinics," by Aanand D. Naik, M.D., Nynikka Palmer, Dr.P.H., Nancy J. Petersen, Ph.D., and others in the March 14, 2011, *Archives of Internal Medicine* 171(5), pp. 453-459.)



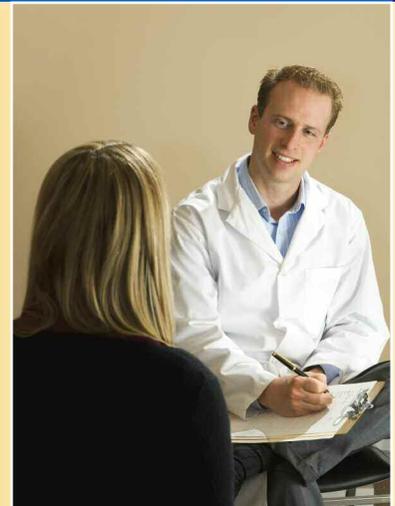


## Educating patients on the use of blood thinners

Fletcher Allen Health Care, the academic medical center affiliated with the University of Vermont, has incorporated AHRQ's DVD, *Staying Healthy and Active With Blood Thinners*, and its companion booklet, *Blood Thinner Pills: Your Guide to Using Them Safely*, (<http://www.ahrq.gov/consumer/btpills.htm>) into its television system and hospital patient education.

Kelli L. Rothenberger, PharmD, at Fletcher Allen Health Care in Burlington, Vermont, is a clinical pharmacist delivering the anticoagulation therapy education to new patients. She says, "I find the DVD and especially the booklet to be quite complete. The response from patients has been good; they find it comforting that the information from both the DVD and our counseling sessions can be found in these resources." Available in both English and Spanish, AHRQ's DVD and booklet are designed to complement education that patients receive in their doctor's office, clinic, pharmacy, or hospital.

Fletcher Allen Health Care offers 30 educational videos on its inpatient system. As of August 2011, *Blood Thinner Pills: Your Guide to Using Them Safely* had the highest number of patient views on the educational listing.



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[www.dhrq.gov](http://www.dhrq.gov)