FACT SHEET

Impact of AHRQ Research

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AHRQ is the lead Federal agency charged with supporting research designed to improve the quality of health care, reduce its cost, address patient safety and medical errors, and broaden access to essential services. AHRQ sponsors and conducts research that provides evidence-based information on health care outcomes; quality; and cost, use, and access. The information helps health care decisionmakers—patients and clinicians, health system leaders, and policymakers—make more informed decisions and improve the quality of health care services.

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The Agency for Healthcare Research and Quality (AHRQ) evaluates the impact and adoption of findings from the research it funds. Highlighted below are examples of AHRQ research and how it has affected the quality of health care.

Improving Patient Clinical Outcomes

- Based on AHRQ's research, Medicare's Peer Review Organizations (now called Quality Improvement Organizations or QIOs) have implemented 73 projects in 42 States to increase anticoagulation therapy for Medicare beneficiaries who have suffered from a stroke. The percentage of Medicare patients discharged on anticoagulation therapy has increased from 58.4 to 71.1 percent. **The Centers for Medicare and Medicaid Services (CMS) estimates that this improvement has prevented up to 1,300 strokes.**
- As a result of a study conducted by the Center for Education and Research on Therapeutics (CERTs) at the University of North Carolina (UNC) at Chapel Hill, and Wake Forest University School of Medicine, Winston-Salem, infants are now being offered Vitamin D to protect against nutritional rickets in North Carolina. Through the AHRQ-funded study, researchers found that many exclusively breast-fed, dark-skinned infants would benefit from Vitamin D supplementation. The North Carolina Pediatric Society requested that the State of North Carolina distribute a multivitamin supplement free-of-charge to any exclusively breast-fed infant or child, 6 weeks of age or older. Funding for the supplement was provided through a Maternal and Child Health Block Grant and distributed through the Supplemental Nutrition Program for Women, Infants and Children. **Over a 16-month period, more than 1,500 children received this supplement a cost of about $1.50 per month, per child.**
- **UnitedHealthcare, a national MCO in Minnetonka, MN representing 7 million commercial members, 430,000 Medicare members, and 500,000 Medicaid members, reports that the recent finding from AHRQ's study on beta-blocker use for myocardial infarction (MI) patients is now a part of its new physician education program.** The published results are used as a reference and cited as such in their materials as a part of its Clinical Profiles Program. Clinical Profiles are sent to physicians and contain information about their patients and whether they have received

screening or treatment according to nationally accepted guidelines.

- **The Los Angeles and Orange County EMS** ordered their paramedics to begin using bag-valve-mask ventilation (BVM) alone on children needing artificial respiration based on the results of a clinical trial sponsored by AHRQ and the Health Resources and Service Administration's Maternal and Child Health Bureau. The study found that BVM had comparable survival rates for young children who have stopped breathing without the risk of an intubation procedure. Also, based on the results of this study, **the American Academy of Pediatrics (AAP)** modeled its Pediatric Education for Prehospital Professionals (PEPP) program to encourage the appropriate use of that technique.

Improving the Value of Health Care Services

- AHRQ funded research for the development of software that runs a new electrocardiogram (EKG) machine that can help physicians more quickly diagnose cardiac ischemia (inadequate blood flow to the heart, a major cause of heart attack) and decide whether thrombolytic drugs should be administered. The software analyzes the EKG for signs of cardiac ischemia or heart attack using a program called ACI-TIPI, or Acute Cardiac Ischemia-Time Insensitive Predictive Instrument. For those patients with signs of a heart attack, the software integrates clinical factors such as age, gender, and duration of symptoms with the EKG findings and provides information that is individualized to the patient about the impact of thrombolytics on the risks of death, stroke, and major bleeding complications. This more complete information can help physicians make decisions about what type of treatment is needed. FDA has approved this evidence-based software for use in hospital emergency rooms and by pre-hospital emergency personnel.

  Two private-sector companies, Hewlett-Packard and Marquette Electronics, now use this as a standard feature on their machines. Between them, the two companies control 80 percent of the EKG machine market in the U.S. **An AHRQ-supported study published in 1998 estimated that widespread use of this instrument could result in 204,000 fewer hospital admissions a year and 112,000 fewer coronary care unit admissions, for an overall annual savings of $728 million.**
- Using the Comprehensive Health Enhancement Support System (CHESS) online services for people facing major life crisis, the University of Wisconsin at Madison has shown that HIV-positive patients, when provided with home-based computer systems, are more efficient consumers of health care. Two AHRQ-funded projects have involved a total of 465 patients in clinical trials and evaluation of the HIV module. Having access to information, decision support, and connections to experts and other patients enabled patients to better monitor their health and alert their doctors when signs of serious illness appeared. These patients had lower health care costs, fewer hospitalizations, and shorter hospital stays than patients without access to CHESS. **Treatment costs in one study were reduced by about $400 per month, and the patients spent 15 percent less time in the doctor's office because they were better prepared with questions.**

Providing the Foundation for Evidence-based Health Policy

- Based on AHRQ's *Technology Assessment for Actinic Keratoses Treatment*, **CMS revised its *Medicare Coverage Issues Manual*** to include a national coverage policy permitting coverage for the treatment of actinic keratoses (AK), a common skin condition that is often the precursor of skin cancer. This assessment suggests that the presence of AK is associated with the development of squamous cell carcinoma (SCC) more than other factors. SCC has the potential to metastasize and accounts for a large percentage of all non-melanoma skin cancer deaths in the Medicare population.
- **Since 2000, the U.S. Commerce Department's Bureau of Economic Analysis has been using the Medical Expenditure Panel Survey Insurance Component (MEPS-IC) to calculate its estimate of the national Gross Domestic Product (GDP)**. Additionally, the Commerce Department used the MEPS-IC in its revisions of GDP estimates from 1997 through the first quarter of 2000. In 2000, the Regional Economic Measurement Division (REMD) of the Bureau of Economic Analysis requested more detailed MEPS-IC data by State and industry groups. Their goal was to create annual division-level State GDP estimates using MEPS data to improve the State-level estimates for employer contributions to group health insurance, which is approximately one-half of the Other Labor Income category.
- **A new Massachusetts law establishing a center for patient safety and medical errors reduction is the direct result of State Senator Richard T. Moore's attendance at a AHRQ-sponsored ULP workshop,** *How Safe is Our Health Care System? What States Can Do to Improve Patient Safety and Reduce Medical Errors.* Moore, the Senate Chair of the Joint Health Care Committee in Massachusetts, has made patient safety and medical error reduction legislative priorities. The legislation, "An Act to Establish the Betsy Lehman Center for Patient Safety and Medical Error Reduction," Senate Bill 526, establishes a center within the Executive Office of Health and Human Services to coordinate and lead the Commonwealth's efforts promoting patient safety and medical error reduction in health care. The Center is named the Betsy Lehman Center for Patient Safety and Medical Error Reduction in honor of the late Boston Globe health reporter who died in 1996 from a four-fold chemotherapy overdose. The Center will coordinate with other Massachusetts agencies that have a role in patient safety (e.g., the Department of Public Health, the Boards of Registration of Medicine, Nursing, Pharmacy, and Allied Health) to collect and establish a statewide database on health care errors, adverse incidents, and near-misses.

Developing Tools that Improve Health Care Quality

- **An AHRQ study on the benefits of prescribing beta-blockers after acute myocardial infarction prompted the National Committee for Quality Assurance (NCQA) to incorporate a performance measure into the Health Plan Employer Data Information Set (HEDIS 3.0).** Hundreds of health plans have been voluntarily reporting their use of the quality indicator since 1996, with 372 reporting on their performance during 2000. Health plans are using the indicator in three ways:
  —To report their results in their public reports to NCQA, to employers they want to do business with, and even certain States, for example, Maryland, New Jersey, and Texas.

—To measure internal quality improvement.
—To monitor their internal quality improvement efforts and to get credit for those efforts, as required by NCQA accreditation standards.

Since July 1999, NCQA has used the reported results to compare health plans nationally and uses the results of that comparison to determine accreditation status.

- The *Guide to Clinical Preventive Services, 2nd edition*, developed by the AHRQ-sponsored U.S. Preventive Services Task Force (USPSTF) has been used by individual providers, professional societies, health plans, and policymakers to guide practice and policy regarding prevention in primary care. Over 70,000 copies of the second edition of the Guide have been sold. **The American Academy of Family Physicians (AAFP) used the assessments of the USPSTF as the foundation for its "Recommendations for the Periodic Health Examination," which outlines standards and guidelines for preventive care for the more than 85,000 family practitioners in the organization.**
- **Since 1997, the Healthcare Association of New York State (HANYS), which represents more than 500 nonprofit and public hospitals, long-term care facilities, and home health agencies, has adapted the HCUP Quality Indicators (QIs) to produce annual comparative reports for its member hospitals.** The purpose of each annual report is to provide individual hospitals with comparative data on a broad range of indicators to help them target areas for improving quality of care and efficiency. The QI outcome measures provide guidance to identify areas for further examination inside each hospital, and the QI measures of access and utilization serve as a springboard for regional and community health initiatives. Each hospital receives its own report with comparisons to statewide norms, regional averages, and peer group averages. Reports prepared for hospital systems include data for each affiliated hospital. Additional comparisons are made with data of other States, including California and Massachusetts.

Helping Patients to Become Involved in Health Care Decisionmaking

- AHRQ's Consumer Assessment of Health Plans (CAHPS®) provides the consumers' view of the quality of care and services they experience with their health plans. This information is used by consumers to make informed choices among health plans, by health care purchasers such as employers or Medicare and Medicaid programs so they can select plans to offer their employees or beneficiaries, and by plans for quality monitoring and improvement. CAHPS® is used by the Federal Employee Health Benefits Program, the Medicare program, more than 20 States, and a wide range of private-sector companies and employer coalitions. **CAHPS data is available to more than 90 million Americans each year to use in making decisions about their health care coverage.**
- To help Federal employees and retirees choose from among the 400-plus health plans in the Federal Employee Health Benefits Program (FEHBP), the United States Office of Personnel Management (OPM) is using PlanSmartChoice developed by Decision Innovation of Research Triangle, North Carolina with funding from AHRQ. PlanSmartChoice is an interactive, multi-media health plan selection tool provided on CD-ROM. In 1998, OPM conducted a five-State pilot study using the decision support tool. The pilot's success led a year later to the award of an OPM contract for Decision Innovation to implement its decision support tool worldwide. As a result, six million Federal employees and retirees now have the option of using the tool to help select the best health coverage for themselves and their families. The Web site was also highlighted in the Health Section of the *Washington Post* during the 2000 open season campaign. **In an online satisfaction survey, 73 percent of users said the site was very helpful or somewhat helpful. Based on this success, OPM committed to a multi-year contract and agreed to widely promote the tool during the 2001 open enrollment.**

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