FACT SHEET

Health Care Costs

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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.

U.S. Department of Health and Human Services
Public Health Service

The United States spends a larger share of its gross domestic product (GDP) on health care than any other major industrialized country. Expenditures for health care represent nearly one-seventh of the Nation's GDP, and they continue to be one of the fastest growing components of the Federal budget. In 1960, for example, health care expenditures accounted for about 5 percent of the GDP; by 2000, that figure had grown to more than 13 percent.

Although the rate of growth in health care costs slowed somewhat in the mid-1990s, it has once again started to rise at a rate that exceeds other sectors of the economy. Thus, identifying ways to contain health care costs and obtain high value for our health care investments continues to be a priority for the Nation, particularly for policymakers and public and private payers.

All players in the health care system—employers, insurers, providers, and consumers, as well as Federal and State policymakers—need objective, science-based information to help them make critical decisions about how to allocate scarce health care resources. For more than 10 years, the Agency for Healthcare Research and Quality (AHRQ)—and its predecessor, the Agency for Health Care Policy and Research—has been working to meet this need. For example:

- AHRQ research focused on health expenditures, health insurance premiums, and payment sources has improved our understanding of how the employment-related health insurance market functions and the cost and availability of coverage for workers in different economic and employment circumstances.
- AHRQ-supported studies have examined out-of-pocket care costs for different segments of the population, the costs associated with expanding health care coverage to the uninsured, the financial consequences of preventable hospital admissions, and the use of waivers for home and community-based care for people with AIDS.
- Extramural researchers supported by AHRQ have analyzed the cost consequences of a variety of policy choices, such as prescription formularies, the use of prior authorization programs, and the use of physician and organizational incentives.

Two major AHRQ initiatives—the Medical Expenditure Panel Survey (MEPS) and the Healthcare Cost and Utilization Project (HCUP)—provide essential data that have been used across the country by researchers and policymakers in tracking health care use and costs and assessing trends over time.

- MEPS data have been used extensively by the research and policy communities. For example, MEPS data have been applied to study the

Reducing Costs —AHRQ Research Makes a Difference

- **Acute Cardiac Ischemia-Time Insensitive Predictive Instrument.** Widespread use of the ACI-TIPI could result in more than 200,000 fewer hospital admissions and 112,000 fewer coronary care unit admissions each year, for an overall annual savings of $728 million. This software runs a new electrocardiogram (EKG) machine that can help ER physicians more quickly identify patients who are having a heart attack and make decisions about thrombolytic therapy to break up blood clots. FDA has approved this software for use in hospital emergency rooms and by prehospital emergency personnel. ACI-TIPI was developed with AHRQ support.
- **Outpatient treatment of pelvic inflammatory disease.** Often, women who have mild to moderate cases of PID can be successfully treated as outpatients, which would result in substantially reduced costs. PID affects more than 1 million U.S. women each year, with annual estimated direct and indirect costs of more than $4 billion. A recent AHRQ-supported study of more than 800 women with clinical signs and symptoms of mild to moderate PID found no differences in outcomes among women who were hospitalized and those treated as outpatients.
- **Use of less expensive antibiotics to treat middle ear infection in children.** Middle ear infection (otitis media) is the most frequent reason for prescribing antibiotics to children. In Colorado, low-cost antibiotics accounted for 21 percent of antibiotic expenditures for otitis media, while high-cost antibiotics accounted for 76 percent of expenditures. A recent AHRQ-funded study found that less costly antibiotics were just as effective as high-cost antibiotics in treating otitis media, and that use of the less expensive antibiotics could have saved nearly $400,000 in Medicaid expenditures for the State of Colorado.
- **Self-management programs reduce the use of health care services among people with chronic diseases.** About 70 percent of all health care expenditures are related to chronic disease. A recent study found that patients with chronic diseases who participated in a brief self-management training program improved their health or had less deterioration and used fewer health care services over a 2-year period, compared with their status before the program. The program resulted in savings of $590 per participant over the 2 years, due to fewer hospital days and outpatient visits. The program has been implemented in a number of health care settings across the United States and abroad.

burden of out-of-pocket health care expenditures, estimate prescription drug expenditures by the elderly, characterize the insured and uninsured populations, identify payment sources, estimate personal expenditures for selected health conditions, and determine the concentration of expenditures among various segments of the population.

- HCUP provides information on inpatient hospital charges at the national and State levels, including all inpatient records with charge data, clinical data, and demographic information from 80 percent of all hospital discharges in the United States. HCUP is a Federal-State-industry partnership that provides a geographically representative sample of hospital discharges across the United States. HCUP data help researchers, policymakers, and health care administrators answer questions about conditions treated and procedures performed in U.S. hospitals and ambulatory surgery centers for the population as a whole and for population subsets, such as children and the elderly. HCUP data provide information on reasons for hospitalization, how long people stay in the hospital, the procedures they undergo while hospitalized, and how specific conditions are treated in the hospital.

Research on Lowering Health Care Costs

AHRQ-funded research provides essential information to help reduce health care costs—to consumers, to employers who sponsor insurance coverage, and especially to the Medicare and Medicaid programs.

- **Reducing the risk of stroke for elderly patients with atrial fibrillation (irregular heartbeat).** About 80,000 strokes occur in America each year that can be attributed to atrial fibrillation (AF). Although warfarin, a blood thinning agent, lowers the risk of stroke in AF patients, less than half of appropriate candidates for warfarin were receiving it. The use of warfarin to prevent stroke could save an estimated $1.45 million each year per 100,000 people aged 65 and older, of whom about 6,000 would have AF. AHRQ-

supported researchers identified why physicians were reluctant to prescribe warfarin and developed a program to help them increase the appropriate use of warfarin. Medicare Peer Review Organizations began projects to increase the use of warfarin and other anticoagulation drugs in 20 States. As a result, use of anticoagulation therapy increased 58 to 71 percent, with a projected 1,285 strokes prevented.

- **Employers may lower costs by offering their employees multiple insurance plans and making the same dollar contribution to each.** The amount of cost-sharing an employer requires as well as the number of plans the employer offers to employees can significantly affect the employer's health care costs. A recent AHRQ study found that employers may be able to lower their health insurance costs by offering their employees three or more health plans and making fixed-dollar contributions to each, thus making employees more price sensitive.
- **More competition among HMOs means lower prices for consumers.** AHRQ-funded researchers compared data on health maintenance organization (HMO) premiums in various markets. Premiums were lower in more competitive markets, where a high percentage of the population was enrolled in HMOs and many HMOs competed for their business.
- **Managed care held down mental health costs for employers and insurers by using a carve-out plan.** A recent AHRQ study looked at a large employer group faced with a State mandate calling for mental health parity, which was expected to lead to rising costs. One insurer introduced a carve-out (an organization separate from the main insurer to manage health care in a specific area) for mental health coverage. After 3 years of the carve-out plan, mental health costs had dropped significantly.
- **Changing Medicaid coverage for anti-ulcer drugs reduced use of these drugs without increasing hospitalizations.** Anti-ulcer medications account for 10 to 13 percent of State Medicaid pharmacy budgets. After AHRQ-supported researchers published their findings, the Florida Medicaid program revised its coverage policies to reduce inappropriate use of anti-ulcer drugs. As a result, Medicaid reimbursement for the drugs decreased 33 percent. There was no associated increase in Medicaid hospitalizations for complicated peptic ulcer disease (PUD), uncomplicated PUD, or non-ulcer peptic disease.
- **Easy-to-use tool predicts which nursing home residents with pneumonia and other respiratory infections can be treated safely without costly hospitalization.** Aggregated charges to the Medicare program for hospital treatment of pneumonia in 2000 were estimated to be over $10.1 billion, and the Medicaid program paid for an additional $3.4 billion in hospital care for pneumonia that year. An average hospital stay for pneumonia care in 2000 cost about $15,000. AHRQ-funded researchers in Missouri developed a tool that nursing home clinical staff can use to determine the severity of pneumonia and whether a resident should be hospitalized.

Current Research on Health Care Costs

AHRQ has many ongoing projects focused on health care costs, cost-effectiveness, and financing, including private insurance, Medicare, Medicaid, and lack of insurance. Examples of projects currently in progress include:

- **Safety and financial ramifications of ED copayments.** Copayments are a commonly used patient-level incentive for modulating the demand for services and the use of unnecessary care. Although we know that copayments and other forms of cost-sharing can lead to reduced use of services, we do not know what effects these incentives have on patient outcomes. These investigators will evaluate the effects of different copayment levels on emergency department (ED) use on treatment costs and patient outcomes within the Kaiser Permanente-Northern California health system. The main outcomes of interest are hospital admissions, ICU admissions, mortality, and treatment costs.
- **Impact of payment policies on the cost, content, and quality of care.** These researchers are combining data from health plans to examine how economic incentives inherent in the relationship between health plans and health care providers (physicians and

hospitals) influence the cost, quality, and type of services received by patients.

- **Incidence of reduced use of prescribed medications in response to out-of-pocket costs among Medicare beneficiaries.** This study is assessing the impact of out-of-pocket costs incurred by Medicare+Choice beneficiaries on their use of prescription medications.
- **Comorbidity, costs, and outcomes in dialysis patients.** Previous research has shown that patients with end-stage renal disease (ESRD) who have high comorbidity—for example, people with diabetes have higher rates of peritoneal dialysis failure. Increasing comorbidity may profoundly impact illness severity, risk of death, resource use, and overall health care costs in the dialysis population. Researchers at the University of Utah are developing a comorbidity tool to help clinicians identify high-risk patients and select the optimal dialysis modality at the initiation of treatment. This will be of particular interest to the Medicare ESRD program, since most dialysis patients are aged 60 or older and have one or more comorbid conditions. The primary outcomes of interest will be hospital days and Medicare hospital costs.
- **Economic analysis of pulmonary artery catheter use.** The pulmonary artery catheter (PAC) is a commonly used device that helps to guide care of critically ill patients, such as those with acute lung injury or acute respiratory distress syndrome. Although clinicians believe that PAC is useful for decisionmaking, PAC substantially increases health care costs, and recent data suggest that it also may increase mortality. These University of Pittsburgh researchers are conducting an economic analysis of PAC to compare long-term survival, quality of life, costs, and cost-effectiveness between patients who receive a PAC and those who receive the less invasive central venous catheter.
- **Patient-centered care and health care costs.** Preliminary research suggests that patient-centered care—which is characterized by incorporating the patient's experience of illness and psychosocial context into shared physician- patient decisionmaking—may reduce use of health care services while improving health status and patient satisfaction, particularly among patients who present with unexplained, hard-to-diagnose complaints. These University of Rochester researchers are examining the relationship between the provision of patient-centered care and health care costs, health status, and satisfaction. Other goals include characterizing the features of patient-physician communication that contribute to lower health care costs and identifying modifiable factors in physician interaction style that can lead to decreased use of services, lower costs, and recognition of patient emotional stress.
- **Analysis of managed care spending for high-cost illnesses.** Recent AHRQ research revealed that the use of health care services is highly concentrated—just 1 percent of the population accounts for 27 percent of all health care expenditures. These findings were based on data from AHRQ's Medical Expenditure Panel Survey (MEPS). The study also found that the concentration of expenditures has been remarkably stable over the past decade, indicating that managed care has had little impact on how resources are spent in treating high-cost illnesses.

Future Research

This list represents only a small sample of the many pressing research questions on health care costs and financing.

Examples of priorities for future research in this area include:

- How can we lower health care costs without compromising quality? Also, how can we lower costs without simply shifting costs from one sector to another?
- What factors are driving the recent rise in overall health care expenditures? For which services are costs rising, and what forces are responsible for the increasing costs?
- What is the relative burden of out-of-pocket expenditures for vulnerable population groups?
- How do expenditures vary by insurance status, and what factors account for variation within insurance groups?
- What are the costs and factors associated with use of alternative and complementary care?
- What proportion of overall health care expenditures is associated with end-of-life care?

More Information

To find out more about AHRQ and our extensive portfolio of research on health care costs and financing, visit the AHRQ Web site at www.ahrq.gov or contact:

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AHRQ Pub. No. 02-P033
September 2002