



Research Activities

No. 227, June 1999

Highlights

Departments

- 2 HIV/AIDS Research**
- 3 Health Care Quality**
- 7 Long-Term Care**
- 8 Primary Care**
- 8 Outcomes/ Effectiveness Research**
- 10 Health Care Use and Delivery**
- 13 Health Care Costs and Financing**
- 15 Managed Care**
- 17 Rural Health**

Regular Features

- 18 AHCPR News and Notes**
- 19 Announcements**
- 26 Research Briefs**

Access to life-sustaining anti-HIV drugs is slowly improving for poor and uninsured patients

In 1996, when the "AIDS cocktail" drugs—protease inhibitors—were first approved, uninsured people with HIV disease waited up to 4-1/2 months longer, on average, than privately insured patients to begin life-sustaining medication, according to a new national study sponsored by the Agency for Health Care Policy and Research. The study also found that HIV patients covered by Medicaid waited 3 months longer than privately insured patients to start protease-inhibitor therapy, blacks started nearly 3 months after whites, and women began about 2 months later than men, on average.

But the findings of this study also contain some encouraging news—the glaring disparities uncovered at the beginning of 1996 have narrowed considerably. By the beginning of 1998, Latinos no longer lagged behind white Anglo HIV patients in five of six indicators used to determine the adequacy or inadequacy of care, and although Medicaid, uninsured, and black patients continued to lag behind their counterparts in several of the measures, the differences were not as pronounced as before. The disparity between female and

male HIV patients, however, remained essentially unchanged.

The findings are from the HIV Cost and Services Utilization Study (HCSUS)—conducted by RAND of Santa Monica, CA, through a cooperative agreement with AHCPR—and are based on data from a national sample of patients representing the nation's 231,400 HIV-infected people receiving care for their disease, who were interviewed in 1996, 1997, and early 1998. The interviews focused on six indicators of access to quality care—receipt of any antiretroviral therapy; initiating, by the end of 1996, treatment with the recently developed "AIDS cocktails," which incorporate protease inhibitor or non-nucleoside reverse transcriptase inhibitor drugs; taking drugs to prevent *Pneumocystis carinii* pneumonia (PCP)—a major killer of HIV-weakened patients; making at least two outpatient visits; not being hospitalized; and not visiting the emergency room (ER) for a problem that did not result in hospitalization.

In early 1996, 7 of every 10 HIV patients failed to meet at least one

continued on page 2

Treatment for HIV

continued from page 1

of the six standards of access to quality care for which they were eligible. Within the 6 months prior to that first interview, 15 percent of the patients had seen their doctors fewer than two times—the number of visits considered adequate for good continuity of care, 23 percent made at least one ER visit for a problem not leading directly to hospitalization, and 19 percent had been hospitalized at least once.

Also in 1996, Medicaid and uninsured patients, along with blacks and Latinos, were found to be less likely than other HIV patients to visit the doctors managing their disease often enough for good continuity of care, and they were more likely to have gone to an ER for problems not leading directly to hospitalization. Black, female, and Medicaid patients were more likely than other patients to have been admitted to a hospital for HIV-

related reasons. Although appropriate ambulatory care does not guarantee that HIV patients will never need to use ERs or be hospitalized for their condition, it reduces the likelihood significantly.

In addition, 30 percent of patients with CD4 cell counts of less than 200 had not taken drugs to prevent PCP, and 41 percent whose CD4 cell counts were less than 500 had not started either protease-inhibitor or non-nucleoside reverse transcriptase inhibitor therapy by the end of 1996.

According to Martin F. Shapiro, M.D., the lead author of the study and co-project director of HCSUS, the overall proportion of HIV patients in compliance with all six standards for which they were eligible had risen to 47 percent by January 1998. Also by early 1998, the percentage who had started either protease inhibitor or non-nucleoside reverse transcriptase inhibitor therapy had climbed to 85 percent among those with CD4

counts of less than 500. In addition, ER use and hospitalization rates fell. The percentage of patients not taking medication to prevent PCP declined, although only moderately, from 30 percent to 26 percent.

Moreover, the disparity between black and white patients in initiating use of newly developed HIV medications decreased from 24 percent to 8 percent, while the gulf between uninsured and Medicaid patients on the one hand, and privately insured patients on the other, declined by about half.

For more information, see "Variations in the care of HIV-infected adults in the United States: Results from the HIV Cost and Services Utilization Study," by Dr. Shapiro, Sally C. Morton, Ph.D., Daniel F. McCaffrey, Ph.D., and others, in the June 23, 1999 *Journal of the American Medical Association*, pp. 2305-2315. Reprints (AHCPR Publication No. 99-R053) are available from AHCPR.** ■

Research Activities is a digest of research findings that have been produced with support from the Agency for Health Care Policy and Research. *Research Activities* is published by AHCPR's Office of Health Care Information. The information in *Research Activities* is intended to contribute to the policymaking process, not to make policy. The views expressed herein do not necessarily represent the views or policies of the Agency for Health Care Policy and Research, the Public Health Service, or the Department of Health and Human Services. For further information, contact:

AHCPR
Office of Health Care Information
2101 East Jefferson Street, Suite 501
Rockville, MD 20852
(301) 594-1364

Mary L. Grady, Managing Editor
Gail Makulowich, Contributing Editor
Susan Toloczko, Design and Production
Karen Migdail, Media Inquiries

HIV/AIDS Research

Choice of hospital, not just insurance status, determines care received by people with HIV

Privately insured patients who are infected with the human immunodeficiency virus (HIV) that causes AIDS are nearly twice as likely to be admitted to private hospitals as uninsured and Medicaid-insured patients. This hospital selection, not merely insurance status, affects the intensity of care they receive, according to a recent study led by Geoffrey F. Joyce, Ph.D., of the RAND Health Sciences Program. The study was supported in part by the Agency for Health Care Policy and Research (NRSA training grant T32 HS00046).

The researchers analyzed patient data linked to billing records from AHCPR's AIDS Cost and Service Utilization Survey (ACSUS). They studied the inpatient and outpatient care of 1,900 adults and

continued on page 3

Choice of hospital for HIV care

continued from page 2

adolescents at various stages of HIV disease in 10 U.S. cities with a high incidence of AIDS. Privately insured patients were more apt to be admitted to private hospitals than Medicaid patients who, in turn, were nearly twice as likely to be admitted as were uninsured patients and those covered by other public programs.

A considerable portion of hospital care resources used—such as laboratory tests and treatments—was accounted for by the hospital in which the patient was admitted. For example, patients covered by Medicaid or “other insurance” had 27 percent to 41 percent lower

charges (indicating fewer care services) than similarly ill patients with private insurance. Yet controlling for site of care reduced the impact of insurance by roughly two-thirds. Despite the importance of hospital-specific factors, the authors could not conclude that insurance did not matter because modest differences in resource use persisted even after controlling for the hospital in which care was received.

More details are in “Variation in inpatient resource use in the treatment of HIV: Do the privately insured receive more care?” by Dr. Joyce, Dana P. Goldman, Ph.D., Arleen Leibowitz, Ph.D., and others, in *Medical Care* 37(3), pp. 220-227, 1999. ■

Health Care Quality

Reliability of current physician report cards questioned

A recent study supported by the Agency for Health Care Policy and Research questions whether the current generation of report cards on how well individual doctors manage specific health conditions can really help people select doctors or help doctors improve their own performance. A growing number of health plans and hospitals write report cards on their doctors.

The study looked at how doctors in three types of medical practices in different parts of the country managed patients with type II diabetes—a disease the researchers selected because of its prevalence in primary care practice and because the way doctors manage diabetes can affect outcomes in their patients.

The researchers found that report cards, or physician profiles, for diabetes were unable to reliably detect true practice differences among doctors at the three medical practices studied: a large, West Coast staff-model health maintenance organization, an urban medical school teaching clinic located in the Midwest, and a group of private-practice physicians in New England. Differences in how the physicians managed their patients’ diabetes—their

practice styles—contributed only 4 percent, at the most, to the overall variance in their patients’ hospitalization, office visit, laboratory use, and blood sugar level control rates. The difficulty in using these outcomes to evaluate physician performance was due, in large part, to the relatively small number of patients with diabetes managed by each doctor.

Sheldon Greenfield, M.D., a coauthor of the study and chairperson of the Diabetes Quality Improvement Project—a collaborative effort by the American Diabetes Association, National Committee for Quality Assurance, Foundation for Accountability, and the U.S. Health Care Financing Administration—says the findings send a wake-up call to health plans and hospitals evaluating their physicians and to individual doctors.

Dr. Greenfield points out that these findings do not mean that physicians should not be accountable for patients’ outcomes, or that attempts to

continued on page 4

Also in this issue:

Using hospital report cards to assess quality, see page 4

Hospital forms for reporting organ donation status, see page 5

Measuring quality in nursing homes, see page 7

Variations in physician referral rates, see page 8

Outpatient care for pneumonia, see page 8

Cryosurgery for prostate cancer, see page 9

Use of hormone replacement therapy, see page 10

Factors that influence patients’ treatment decisions, see page 11

Skepticism about health care and risk of early death, see page 13

Annual costs associated with sinusitis, see page 13

Hospital ownership and its effect on diversifying care, see page 14

Factors that affect physicians’ satisfaction with medical practice, see page 15

Improving the fiscal health of rural hospitals, see page 17

Physician report cards

continued from page 3

evaluate the medical and quality-of-life outcomes of care are futile because the average doctor doesn't see enough patients for a specific condition to make analysis meaningful. Instead, the findings suggest that health plans and hospitals need to take a better look at the science they're using to do report cards, he concludes.

According to Dr. Greenfield, who is with the New England Medical Center in Boston, each of the physicians in the study would have had to manage over 100 diabetic patients for the researchers to detect any meaningful differences among them. Apart from hypertension, it is difficult to imagine that there would be enough cases per primary care physician to construct disease-specific profiles for almost any other chronic condition, notes Dr. Greenfield, who added that doctors sometimes receive evaluations based on as few as four patients. The science does not support such

reckless use of numbers for judging physicians. More accurate judgments could be made if physicians were evaluated in groups for the purpose of treating specific diseases.

The lead author of the study, Timothy P. Hofer, M.D., of the VA Ann Arbor Healthcare System and the University of Michigan, said another problem with the current method of profiling individual doctors is that the process can backfire if it is linked to powerful incentives not to treat patients whose conditions are hard to manage because they may fail to follow instructions or for other reasons and who incur high costs. The easiest way a doctor can avoid getting a bad report card is to drop problematic patients. According to Dr. Hofer and his colleagues, those implementing such profiling systems would be as much to blame as the doctors who deny care to the most vulnerable people needing medical help.

Sherrie H. Kaplan, Ph.D., a co-author of the study and an expert on patient satisfaction notes that at least

40 or 50 patients per doctor are needed to accurately evaluate satisfaction with an individual physician's care. The current study did not report findings about the evaluation of patient satisfaction, but the issue was addressed in the AHCPR-funded Type II Diabetes Patient Outcomes Research Team Study (AHCPR grant HS06665), a 5-year research project from which the current study is derived. Dr. Kaplan, who is with the New England Medical Center, and the other authors, were members of the study team, which was under the direction of Dr. Greenfield.

Funding for the current study was also provided by the Veterans Affairs Health Services Research and Development Service—a component of the Department of Veterans Affairs. Details are in "The unreliability of individual physician 'report cards' for assessing the costs and quality of care of a chronic disease," in the June 9, 1999 issue of the *Journal of the American Medical Association*, pp. 2098-2105. ■

Hospitals share quality of care report cards with administrators and key staff but doubt their value

Report cards that States use to evaluate the quality of hospital care are often based on the percentage of hospital patients with a particular diagnosis who experienced an adverse outcome, adjusting for their risk factors. For instance, hospitals with a higher-than-expected number of deaths among cardiac surgery patients would be rated poorly. Hospital leaders view these State quality-of-care report cards with little enthusiasm and say they have limited usefulness, according to a study supported by the Agency for Health Care Policy and Research (HS08574).

Only 8 percent of hospital leaders in California and 22 percent in New York rated their State report "very good" or excellent" in facilitating quality improvement. Two key concerns were the excessive delay before patient outcomes data were released and the lack of specific information about how to modify processes of care to improve patient outcomes.

The California Hospital Outcomes Project (CHOP) began in 1991 to produce annual reports on risk-adjusted outcomes at acute hospitals using coded hospital discharge abstracts. New York's Cardiac Surgery Reporting System (CSRS) began in 1989 with creation of a special clinical data system for cardiac surgery. Patrick S. Romano, M.D., M.P.H., and his colleagues at the University of California, Davis' School of Medicine surveyed leaders of the 398 hospitals listed in the 1996 CHOP report and the 31 hospitals listed in the 1996 CSRS report; the response rate was 73 percent in California and 87 percent in New York.

Over 90 percent of hospitals in both States shared or discussed the outcomes report with high-level administrators and quality improvement staff. Leaders at hospitals with the lowest mortality rates rated the overall quality of the CHOP report significantly better, found it to be more useful, and better understood its risk

continued on page 5

Hospital report cards

continued from page 4

adjustment methods than did leaders at hospitals with moderate or high mortality rates. Hospital leaders tend to blame the messenger when their facilities are rated poorly and argue that the risk-adjustment methods are inadequate, explain the researchers.

In conclusion, Dr. Romano and his colleagues point out that the New York report was rated significantly

better and judged to be more useful by hospital leaders than the California report. Although the reasons for this difference are unclear, it does have policy implications for other States and organizations that are trying to determine how best to report outcomes.

See "Grading the graders: How hospitals in California and New York perceive and interpret their report cards," by Dr. Romano, Julie A. Rainwater, Ph.D., and Deirdre Antonius, in *Medical Care* 37(3), pp. 295-305, 1999. ■

State-required hospital forms do not accurately document eligibility and consent for organ donation

Many States require hospitals to complete a form for each patient who dies to report the patient's organ and tissue donation eligibility status—whether or not a request for an organ was made to the patient's family—and the outcome of the request. However, these State-required forms are not very accurate in documenting organ eligibility and procurement and thus may overestimate the organ donor pool, concludes a study supported in part by the Agency for Health Care Policy and Research (HS08209).

Designating and training responsible hospital staff on proper completion of the forms and designing forms that are easy to complete and as unambiguous as possible, would improve organ donation reporting, recommend Laura A. Siminoff, Ph.D., of Case Western Reserve University, and

Kristine A. Nelson, R.N., M.N., of LifeBanc. They conducted detailed chart reviews on a total of 2,270 patients who died during a 6-month period in 1997 at four trauma hospitals in Ohio. They also interviewed hospital health care providers and the staff members at organ procurement organizations and reviewed organ donation forms required by the Ohio Department of Health (ODH).

The ODH forms often contained missing, inaccurate, and contradictory data. For instance, the ODH forms reported almost four times more eligible organ donors than actually existed (151 patients vs. 39 patients identified by chart review). Also, ODH forms indicated that a request for organ donation was made in 136 cases compared with 25 requests identified through chart review and interviews with health care providers. The hospital ODH

forms identified 21 families as consenting to organ donation compared with 14 families identified through manual chart review and health care provider interviews. The forms correctly identified 13 eligible families as giving consent but incorrectly identified one family as not giving consent when the family had consented. Accuracy in reporting organ donor eligibility status of patients ranged from 77 to 98 percent and in recording the consent decision from 50 to 75 percent in the study hospitals.

See "The accuracy of hospital reports of organ donation eligibility, requests, and consent: A cross-validation study," by Dr. Siminoff and Ms. Nelson, in the March 1999 *Joint Commission Journal on Quality Improvement* 25(3), pp. 129-135. ■

Note: Only items marked with a single (*) or double (**) asterisk are available from AHCPR. Items marked with a single asterisk (*) are available from AHCPR's clearinghouse. Items with a double asterisk (**) are also available through AHCPR InstantFAX. Three asterisks (***) indicate NTIS availability. See the back cover of *Research Activities* for ordering information. Consult a reference librarian for information on obtaining copies of articles not marked with an asterisk.

AHCPR's CAHPS™ project is developing surveys designed to help consumers choose the right health plan

In the fall of 1995, the Agency for Health Care Policy and Research awarded three cooperative agreements to consortia headed by Research Triangle Institute, RAND Corporation, and Harvard Medical School to conduct the Consumer Assessment of Health Plans Study (CAHPS™). AHCPR and the CAHPS™ consortia also have collaborated with the Health Care Financing Administration (HCFA) in this effort. A special supplement of *Medical Care* tells the story of this project. The goal of CAHPS™ is to develop an integrated set of surveys and reports to consumers to help them select a health plan that meets the needs of their families.

The CAHPS™ team has developed and tested surveys for a variety of populations and delivery systems, including adult and child versions for the commercially insured, adult and child versions for people covered by Medicaid managed care or Medicaid fee for service, and an adult version for Medicare managed care. The CAHPS™ package of reporting products includes two versions of a poster and one brochure, a print guide, *Compare Your Health Plan Choices*, and a computer guide, "Decision Helper."

The CAHPS™ grantees began working in early 1997 with four demonstration sites to implement the entire package. Three other demonstration sites geared up in 1998. In addition, there are more than 40 other adopters of CAHPS™, including purchasing coalitions, State Medicaid agencies, and private purchasers. HCFA has twice used CAHPS™ to survey its Medicare beneficiaries in managed care, and the U.S. Office of Personnel

Management will provide CAHPS™ data to Federal employees in 1999. Additionally, the National Committee for Quality Assurance (NCQA) and the CAHPS team merged the CAHPS survey and the NCQA Member Satisfaction Survey. The merged instrument was used this year by NCQA to survey consumers about health plans seeking accreditation from NCQA. Feedback from the demonstration sites indicates that the CAHPS™ survey succeeds in covering the topics that are most important to sponsors and consumers, while keeping to a 15- to 20-minute consumer interview.

The papers included in the March 1999 special supplement to *Medical Care* 37(3) are listed here. Reprints of articles authored by AHCPR staff members are available from AHCPR, as noted. Consult a reference librarian for help in obtaining copies of other articles in this supplement.

- Crofton, C., Lubalin, J.S., and Darby, C., "Foreword," pp. 1-9. Reprints (AHCPR Publication No. 99-R064) are available from AHCPR.**
- Brown, J.A., Nederend, S.E., Hays, R.D., and others, "Special issues in assessing care of Medicaid recipients," pp. 79-88.
- Carman, K.L., Short, P.F., Farley, D.O., and others, "Epilogue: Early lessons from CAHPS™ demonstrations and evaluations," pp. 97-116. Reprints (AHCPR Publication No. 99-R065) are available from AHCPR.**
- Fowler, F.J., Gallagher, P.M., and Nederend, S., "Comparing telephone and mail responses to the CAHPS™ survey instrument," pp. 41-49.
- Gallagher, P.M., Fowler, F.J., and Stringfellow, V.L., "Respondent selection by mail: Obtaining probability samples of health plan enrollees," pp. 50-58.
- Harris-Kojetin, L.D., Fowler, F.J., Brown, J.A., and others, "The use of cognitive testing to develop and evaluate CAHPS™ 1.0 core survey items," pp. 10-
- Reprints (AHCPR Publication No. 99-R066) are available from AHCPR.**
- Hays, R.D., Shaul, J.A., Williams, V.S., and others, "Psychometric properties of the CAHPS™ 1.0 survey measures," pp. 22-31.
- McGee, J., Kanouse, D.E., Sofaer, S., and others, "Making survey results easy to report to consumers: How reporting needs guided survey design in CAHPS,™" pp. 32-40.
- Schnaier, J.A., Sweeny, S.F., Williams, V.S., and others, "Special issues addressed in the CAHPS™ survey of Medicare managed care beneficiaries," pp. 69-78. Reprints (AHCPR Publication No. 99-R066) are available from AHCPR.**
- Shaul, J.A., Fowler, F.J., Zaslavsky, A.M., and others, "The impact of having parents report about both their own and their children's experiences with health insurance plans," pp. 59-68.
- Weidmer, B., Brown, J., and Garcia, L., "Translating the CAHPS™ 1.0 survey instruments into Spanish," pp. 89-96. ■

Long-Term Care

Quality of care is most important nursing home measure

In spite of their different and sometimes adversarial roles, nursing home advocates, administrators, regulators, ombudsmen, and nursing service directors agree on the three most important yardsticks for measuring how well the Nation's nursing homes are doing their job, according to a new study sponsored by the Agency for Health Care Policy and Research (HS07574). The five nursing home "stakeholder" groups said that the quality of the care they provide is the most important yardstick, followed closely by the quality of life of their residents and then by their residents' rights.

These three areas are among 17 "categories of quality" that the Health Care Financing Administration (HCFA) regulations require State governments to evaluate to determine if nursing homes should be certified for participation in Medicare and Medicaid. State agencies survey the nearly 17,000 nursing homes every 12 to 15 months on behalf of HCFA.

The study, which was led by Charlene Harrington, Ph.D., R.N., a

professor of social and behavioral sciences at the University of California, San Francisco's School of Nursing, found that 89 percent of the stakeholders ranked quality of care among the three top categories, nearly 88 percent placed quality of life there, and about 75 percent put residents' rights among the top three. Although the stakeholders agreed on the three most important categories for measuring quality, they differed in how they thought each should be ranked. Nursing home advocates and nursing directors tended to give quality of care the highest ranking, whereas administrators and State licensing and survey agency training coordinators were more likely to pick quality of life as the most important category. State nursing home ombudsmen generally chose residents' rights as the most important.

Overall quality of care provided to residents, followed by their ability to carry out usual everyday activities, such as bathing, dressing, and eating (commonly referred to as activities of daily living), and care specifically aimed at helping residents maintain

their ability to conduct these activities, were selected as the three most important subcategories of quality of care. The three most important subcategories of quality of life were dignity, self-determination, and participation, along with the accommodation of residents' needs, while exercise of rights, informing residents of their condition, and freedom from reprisal ranked first, second, and third in the residents' rights category.

The survey, which was conducted in 1996, involved administrators and nursing directors drawn from a random sample of nursing homes, ombudsmen, and survey training and certification coordinators from all 50 States and the District of Columbia and nursing home advocates from 34 States.

Details are in "Stakeholders' opinions regarding important measures of nursing home quality for consumers," by Dr. Harrington, Joseph Mullan, Ph.D., Lisa C. Woodruff, M.G.S., and others, in the May-June 1999 *American Journal of Medical Quality*, pp. 124-131. ■

Residents of nursing homes with special care units and more physicians are less likely to be hospitalized

From 13 percent to 63 percent of nursing home residents are hospitalized every year. These hospitalizations cause relocation stress as well as the risk of hospital-induced infections. Individuals who reside in nursing homes with special care units, more physicians, and physician extenders (nurse practitioners or physician assistants) are less apt to be hospitalized than residents at other homes, according to a recent study. Medicare managed care plans should consider the medical care capacity and clinical resources of nursing facilities if they want to limit costly hospital admissions, recommends Vincent Mor, Ph.D., of Brown University.

In a study supported in part by the Agency for Health Care Policy and Research (National Research Service Award T32 HS00011), the researchers analyzed 1993 data from 10 States on 2,080 residents in 253 nursing homes. They examined the effect of facility characteristics on the rate of hospitalization of nursing home residents while controlling for resident characteristics that are known to affect the decision to hospitalize.

Analysis showed that residents in facilities with special care units were 30 percent less likely to be

continued on page 8

Hospitalization of nursing home residents

continued from page 7

hospitalized. There was no association between nursing staff levels and hospitalization, but residents of facilities with greater than the median full-time equivalent (FTE) physicians per 100 beds were 21 percent less likely to be hospitalized. Also, the presence of physician extenders in the nursing home reduced the risk of hospitalization

by 41 percent. These findings suggest that increased physician involvement in nursing homes may improve quality of care. The availability of diagnostic resources, such as x-ray equipment and a laboratory on site, also might facilitate the decision to keep the patient in the home when a doctor is available.

See "Facility characteristics associated with hospitalization of nursing home residents," by Orna Intrator, Ph.D., Nicholas G. Castle, Ph.D., and Dr. Mor, in *Medical Care* 37(3), pp. 228-237, 1999. ■

Primary Care

Primary care physician referral rates are a physician-driven behavior

Excessive referrals to specialists by primary care physicians (PCPs) may result in unnecessary tests, procedures, and costs. On the other hand, under-referral may result in health problems and additional costs that could have been avoided by appropriate specialty care.

PCP referral rates are mostly driven by the physician, concludes a study supported by the Agency for Health Care Policy and Research (HS09397). It found that referral rates and variations in referral rates of PCPs in a large managed care organization (MCO) remained very stable over time and for various diagnoses, even after adjusting for differences in patient case mix.

Peter Franks, M.D., and his colleagues from the University of

Rochester analyzed the medical claims database of the largest local MCO in Rochester, NY. The MCO employed an independent practice association (IPA) model, in which neither PCPs nor specialists were capitated (paid a certain amount of money per patient or per diagnosis). Each patient was assigned to a PCP, and over 95 percent of local PCPs participated in the IPA. The researchers examined the referral rates for adults 25 years of age and older enrolled in the MCO who visited their PCPs during 1995 and 1996.

About 40 percent of patients are referred each year. In this study, family physicians referred significantly fewer patients than internists, and older physicians made more referrals than younger

physicians. The large variations in PCP referral rates (5 percent to over 60 percent) were only minimally affected by patient case mix. The researchers conclude that PCP referral rates largely reflect a physician-driven behavior that is relatively stable over time. These researchers are now looking at the underlying physician factors that drive this behavior and its impact on costs and patient outcomes.

For more details, see "Variations in primary care physician referral rates," by Dr. Franks, Jack Zwanziger, Ph.D., Cathleen Mooney, M.S., and Melony Sorbero, M.S., in the April 1999 *Health Services Research* 34(1), pp. 323-329. ■

Outcomes/Effectiveness Research

Researchers compare outcomes for pneumonia patients who receive outpatient treatment with those who are hospitalized

Most outpatients treated for community-acquired pneumonia (CAP) have an excellent prognosis, even though their symptoms may persist for a month. Patients treated for pneumonia in an outpatient setting

usually are not as sick when they begin treatment as patients who are hospitalized at the outset. Many of the more seriously ill patients hospitalized with CAP suffer from complications, a later return to usual activities, and sometimes even death,

according to the Pneumonia Patient Outcomes Research Team (PORT), which was supported by the Agency for Health Care Policy and Research (HS06468) and led by Wishwa N.

continued on page 9

Treatment of pneumonia

continued from page 8

Kapoor, M.D., M.P.H., of the University of Pittsburgh.

The researchers conducted a multicenter, prospective, observational study to describe processes of care for CAP and to assess medical outcomes for 944 outpatients and 1,343 hospitalized patients with CAP. Less than 1 percent of outpatients died, only 8 percent of outpatients who survived had one or more medical complications, and only 7.5 percent were later hospitalized. On the other hand, 8 percent of inpatients died, and 80 percent of the deaths were pneumonia-related. Nearly 70 percent of inpatients who survived and 95 percent of those who died

had one or more medical complications. Nearly 90 percent of outpatients had returned to usual activities or work by the 30-day followup; 57 percent of nonworking inpatients and 82 percent of working inpatients returned to usual activities during this period.

Results also indicated areas for improving processes of care for CAP. For instance, some form of laboratory testing—such as measurement of a complete blood cell count or serum electrolyte and/or glucose levels—was performed in nearly half of outpatients, but test results were rarely abnormal. This suggests that directed testing (for example, ordering a blood glucose test only for diabetic patients) is preferable to routine laboratory testing of CAP

outpatients. On the other hand, only 71 percent of inpatients had blood cultures to identify the specific pathogen causing the pneumonia before initiation of antibiotic therapy. This identifies an area for quality improvement, especially since recent studies have shown improved 30-day survival in patients who have had blood cultures performed within 24 hours of hospital admission, concludes first author Michael J. Fine, M.D., M.Sc.

More details are in "Processes and outcomes of care for patients with community-acquired pneumonia," by Dr. Fine, Roslyn A. Stone, Ph.D., Daniel E. Singer, M.D., and others, in the May 10, 1999 *Archives of Internal Medicine* 159, pp. 970-980. ■

More long-term research is needed on cryosurgery as a second-line therapy for prostate cancer

A new technology assessment by the Agency for Health Care Policy and Research says research is needed to determine the long-term outcomes of cryosurgery in men who undergo the procedure because radiation therapy was not effective in treating their prostate cancer. Cryosurgery destroys diseased tissue by freezing it. An estimated 179,300 men will be diagnosed with prostate cancer in 1999, and 37,000 will die from the disease.

Although some deaths from prostate cancer in patients not helped by radiation therapy may be prevented or delayed by cryosurgery, morbidity remains high. We just don't know enough about the long-term effects of the procedure, according to AHCPR Administrator John M. Eisenberg, M.D. Prospective clinical trials appear to be warranted because they would help determine the long-term survival benefits and make possible a comparison of cryosurgery patient survival rates with those of untreated biopsy-positive patients.

AHCPR's technology assessment, which was conducted at the request of the Health Care Financing Administration (HCFA)—the Federal agency responsible for the Medicare program—found that in the short term, cryosurgery can result in negative prostate biopsies following surgery and low or undetectable serum PSA

levels in some patients. Some patients who have failed radiation therapy have benefitted from the use of cryosurgery as a second-line or salvage therapy.

According to the assessment, outcomes of salvage cryosurgery have tended to improve with better instrumentation, better surgical technique, and greater experience on the part of the urologists performing the procedure. But the assessment also found that while the procedure itself is well tolerated, postoperative complications are significant. Major complications of salvage cryosurgery include incontinence, impotence, and obstructive urinary symptoms.

Cryosurgery is increasingly being used as a second-line therapy in men not helped by radiation treatments. Because cryosurgery is better tolerated than traditional prostate cancer surgery (prostatectomy), it can be offered to men who would not normally be candidates for the surgery because of advanced age or the presence of other health problems.

Free copies of the assessment, *Cryosurgery for Recurrent Prostate Cancer Following Radiation Therapy. Health Technology Assessment No. 13* (AHCPR Publication No. 99-0004), are available from AHCPR.* ■

Health Care Use and Delivery

Use of hormone replacement therapy may be more strongly linked to sociodemographic than clinical factors

A new national study provides a glimpse into factors associated with current use of hormone replacement therapy (HRT) by postmenopausal women. It found that women at risk for heart disease, who are reported to gain the most health benefits from HRT, are no more likely to use HRT than other women. In fact, a woman's educational level, age, and location were more strongly associated with HRT use than heart disease risk or other clinical factors. The study was supported in part by the Agency for Health Care Policy and Research (National Research Service Award training grant T32 HS00020).

Nancy L. Keating, M.D., M.P.H., of Harvard Medical School, and her colleagues examined patterns of HRT use in a national sample of postmenopausal women during 1995. They found that about 38 percent of postmenopausal women

were using HRT in 1995. Three times as many women who had undergone a hysterectomy were currently using HRT compared with women who had an intact uterus (59 percent vs. 20 percent). Women in the latter group who choose to take HRT usually also take progestin—which may cause bloating, depression, and fatigue—to prevent breakthrough bleeding.

Rates of HRT use did not significantly differ by smoking status, family history of heart attack, personal history of hypertension or elevated cholesterol, or other cardiovascular risk factors. In fact, women with diabetes, a condition that increases the risk for heart disease, were substantially less likely than women without diabetes to use HRT (17 percent vs. 39 percent).

On the other hand, college graduates were nearly four times more apt to use HRT than women

who had not graduated from high school, and women in the South and West were nearly three times more likely to use HRT than those in the Northeast. Use of HRT decreased with increasing age, possibly because older women experienced menopause at a time when HRT was less commonly prescribed. Well-educated women may be more likely to read articles about HRT, have more substantive discussions with physicians about personal benefits and risks, and seek this treatment, explain the researchers.

See "Use of hormone replacement therapy by postmenopausal women in the United States," by Dr. Keating, Paul D. Cleary, Ph.D., Alice S. Rossi, Ph.D., and others, in the April 6, 1999 *Annals of Internal Medicine* 130, pp. 545-553. ■

Self-reported health status is a strong predictor of health care utilization

According to a recent study led by Arlene S. Bierman, M.D., M.S., of the Agency for Health Care Policy and Research, the response to a single question about general health status strongly predicts a person's subsequent use of health care services. Dr. Bierman and her colleagues from Dartmouth Medical School asked participants in the 1992 Medicare Current Beneficiary Survey to rate their health as excellent, very good, good, fair, or poor. They linked responses with data from the 1993 Medicare Continuous History Survey. According to the researchers, a person's response to the question accurately predicted the use of health care services over the next year.

Results showed that 18 percent of the beneficiaries rated their health as excellent, 56 percent rated their health as very good or good, 17 percent said they were

in fair health, and 7 percent rated their health as poor. Medicare expenditures had a marked inverse relation to self-assessed health ratings—those who rated their health the worst spent the most on health care.

In the year after assessment, age- and sex-adjusted annual health care expenditures varied five-fold, from \$8,743 for beneficiaries rating their health as poor to \$1,656 for those rating their health as excellent. Hospitalization rates followed the same pattern. Those who rated their health as poor had 675 hospitalizations per 1,000 beneficiaries per year compared with 136 per 1,000 for those rating their health as excellent. The investigators found a similar pattern of expenditures and use for other simple, easily obtained measures of health: number of chronic conditions, disability level as reflected by difficulty in performing IADLs and ADLs

continued on page 11

Self-reported health status

continued from page 10

(instrumental activities of daily living and activities of daily living), and the degree to which health limits social activities.

The Medicare managed care capitation formula reimburses health plans a set amount per beneficiary regardless of the beneficiary's health status. Thus, plans that enroll healthier patients benefit financially, and plans that enroll a disproportionate number of patients in poor health are at a competitive disadvantage. Dr. Bierman and her colleagues conclude that Medicare's current capitation formula unintentionally creates powerful financial incentives for favorable risk selection, and that it penalizes plans which seek to excel in the

care of high-risk beneficiaries. They stress the need for health-based payment formulas, as mandated by the 1997 Balanced Budget Amendment, that give plans incentives to develop innovative and efficient models of care and minimize the financial advantages that can be gained through favorable selection. Evaluation will be needed, however, to assure that risk-adjusted payment achieves these goals.

See "How well does a single question about health predict the financial health of Medicare managed care plans?" by Dr. Bierman, Thomas A. Bubolz, Ph.D., Elliott S. Fisher, M.D., M.P.H., and John H. Wasson, M.D., in the March 1999 issues of *Effective Clinical Practice* 2(2), pp. 56-62. Reprints (AHCPR publication No. 99-R060) are available from AHCPR.** ■

Concerns about mental and social well-being may strongly influence patients' treatment decisions

Patients' preferences for diverse health states—that is, their mental, physical, and social health—may strongly shape their treatment decisions. For instance, patients may prefer to maintain a certain tolerable quality of life rather than risk additional suffering that could result from high-technology treatments. This is a particularly important point for managed care practices, where concerns have been raised that cost-containment efforts could result in treatment decisions that undervalue patient preferences for their health outcomes, explains Kenneth B. Wells, M.D., M.P.H., of the University of California, Los Angeles.

In a recent study supported by the Agency for Health Care Policy and Research (HS08349), Dr. Wells and his colleagues gathered data from 16,689 adult outpatients visiting 46 primary care clinics in managed care organizations in five States. Two

approaches were used to assess the value patients placed on their health status. In the first approach, the patients were instructed to imagine that they had 10 years to live in their current state of health and that there was a treatment that could either give them perfect health or kill them immediately. They were asked what chance of success the treatment had to have before they would accept it. In the second approach, patients were asked about their willingness to undergo a treatment that would result in a shortened life spent in perfect health. The majority of patients (70 percent) were not willing to give up any months of life or take any chance of death for perfect health, but most of these patients considered their current health quite good. Those with chronic medical conditions were more inclined to take a risk.

While concerns about physical health explained 35 to 55 percent of

variation in patient treatment preferences, patients also placed a high value on their mental health (20 to 42 percent of preference variation). Almost one-quarter (16 to 23 percent) of the relative contribution to preference variation was due to one's level of social functioning. Mental health was strongly related to health preferences even among patients with chronic medical conditions, such as arthritis or diabetes.

More details are in "What outcomes matter to patients? A study of patient preferences in primary care," by Cathy Donald Sherbourne, Ph.D., Roland Sturm, Ph.D., and Dr. Wells, in the June 1999 *Journal of General Internal Medicine* 14, pp. 357-363. ■

Adolescents accurately characterize the preventive care they receive

According to a study supported in part by the Agency for Health Care Policy and Research (HS08192) and the Centers for Disease Control and Prevention, adolescents are tuned into preventive health care. They are aware of and can describe the preventive services they receive. Adolescent care often includes confidential discussions between teenagers and their clinicians about sensitive issues, including sexuality, reproductive health, substance use, mental health, and abuse. These confidential encounters may not be accurately reflected in either parent reports or medical charts. Also, physicians tend to overestimate their delivery of preventive services, explains Jonathan D. Klein, M.D., M.P.H., of the University of Rochester Medical Center.

Dr. Klein and his colleagues recruited 400 adolescents (14 to 21

years of age) from 15 community-based primary care practices in one New York county and audiotaped their visits with physicians. A total of 354 adolescents were surveyed by phone either 2 to 4 weeks or 5 to 7 months after their visit to assess their recollection of the preventive health care they received. The researchers coded the audiotapes to assess delivery of 33 specific preventive services and compared the tapes and chart documentation of services with adolescent recall of the services.

Preventive screening and counseling during these visits ranged from 2 percent for discussing anabolic steroids to 86 percent for discussing sex. Adolescents' recall of the care they received was quite good, with the 2-to-4 week group recalling slightly more than the 5-to-7-month group. Both groups recalled with moderate to high sensitivity 24

of the 33 preventive screening and counseling items, including discussions of weight, diet, body image, exercise, seatbelt use, bike helmet use, cigarettes/smoking, smokeless tobacco, alcohol, drugs, steroids, sex, sexual orientation, birth control, condoms, AIDS, sexually transmitted diseases, school, family, future plans, emotions, suicidal thoughts, and abuse.

See "Developing quality measures for adolescent care: Validity of adolescents' self-reported receipt of preventive services," by Dr. Klein, Caryn A. Graff, M.P.H., John S. Santelli, M.D., M.P.H., and others, in the April 1999 *Health Services Research* 34(1), pp. 391-404. ■

Early DNR orders do not seem to affect medical resource use

Do-not-resuscitate orders (DNRs) issued 24 or more hours after hospital admission (delayed DNRs) seem to serve more as a medical "last rites" and are a marker rather than a cause of higher costs, concludes a study by K. Eric De Jonge, M.D., of Johns Hopkins University School of Medicine. Dr. De Jonge and colleagues found that DNR orders written at admission (admission DNRs) and delayed DNRs had different economic outcomes. Patients with delayed DNRs had longer hospital stays, higher mortality, and greater total costs, but daily costs were similar to those for patients with admission DNRs and patients without DNRs (full code).

The greater costs associated with delayed DNRs are probably due more to the patient's clinical deterioration and longer hospitalization than to the DNR order itself, explains Dr. De Jonge. In the study supported by the Agency for Health Care Policy and Research (National Research Service Award F32 HS00075), the researchers identified 265 terminally ill patients with illnesses such as AIDS and unresectable lung cancer. They compared their hospital costs and lengths of stay with admission DNRs, delayed DNRs, or no DNRs.

Admission DNR patients had a shorter length of stay (9.5 days vs. 12.8 days), lower total hospital costs (\$6,861 vs. \$9,334), and equivalent

daily costs (\$712 vs. \$709) compared with all patients who were admitted without DNRs (full code and delayed DNR patients). Patients whose orders remained full code throughout the hospital stay had similar lengths of stay, total hospital costs, and daily costs as patients with admission DNRs. These equivalent costs suggest that early DNR orders do not affect medical resource use.

See "The timing of do-not-resuscitate orders and hospital costs," by Dr. De Jonge, Daniel P. Sulmasy, M.D., Ph.D., Karen G. Gold, Ph.D., and others, in the March 1999 *Journal of General Internal Medicine* 14, pp. 190-192. ■

Skepticism about the value of conventional medical care may be a risk factor for early death

Research has shown that individual patient attitudes toward health and health care are independently predictive of health care use and outcomes.

Likewise, an individual's rating of his or her own overall health has been shown to be one of the best predictors of future use of health care and mortality. A recent study has found that doubts about the value of health care are associated with a higher risk for early death. The study was conducted by researchers from the University of Rochester School of Medicine and Dentistry (supported by AHCPR grant HS09522) and the University of Washington, Seattle, along with Carolyn M. Clancy, M.D., and Jessica S. Banthin, Ph.D., of the Agency for Health Care Policy and Research.

The researchers used data from the 1987 National Medical Expenditure Survey of 18,240 people, a nationally representative sample of the noninstitutionalized U.S. population. They measured skepticism via an eight-item scale and ascertained death 5 years later through the National Death Index. Medical skepticism was defined through statements about doubts of the ability of conventional medical care to appreciably alter health status. For instance, a skeptic would agree with statements in the skepticism scale that a person can overcome most illness without the help of a medically trained professional, or that home remedies are often better than drugs prescribed by a doctor.

An increase of 1 point in the 5-point skepticism scale was associated with an 11 percent increase in mortality 5

years later (Adjusted Hazard Ratio, AHR 1.11), comparable to the effect of an 18-month increase in age. The mortality risk associated with medical skepticism was lessened by additional adjustment for unhealthy behaviors (AHR 1.07). Further adjustment for smoking status alone weakened the AHR to 1.08. Additional adjustment for physician visits or medical insurance status had little impact on AHR for medical skepticism (AHR 1.12 and 1.11, respectively).

These findings suggest that the effect of skepticism on mortality may be largely explained by higher rates of risky behavior, such as smoking, rather than lower rates of health care use. Although these findings do not prove that skepticism causes higher mortality, they do raise concerns about the trend in the United States towards increasing health care cost shifting to patients. Because skepticism toward health care is associated with both lower rates of health care insurance and lower health care use, such a trend has the potential to further increase long-term mortality rates among the medically skeptical, conclude the authors.

See "Does skepticism towards medical care predict mortality?" by Kevin Fiscella, M.D., M.P.H., Peter Franks, M.D., Dr. Clancy, Mark P. Doescher, M.D., and Dr. Banthin, in *Medical Care* 37(4), pp. 409-414, 1999. Reprints (AHCPR Publication No. 99-R059) are available from AHCPR.** ■

Health Care Costs and Financing

Annual health care costs associated with sinusitis and conjunctivitis are enormous

Allergic rhinitis (AR), the typically stuffy runny nose of allergy sufferers, can lead to development or worsening of asthma, sinusitis, middle ear infections, and nasal polyps. Sinusitis also can lead to development or worsening of asthma and related airway disorders. Conversely, treatment of AR and sinusitis can reduce the severity and costs of care of these related illnesses. Treatment of allergic rhinoconjunctivitis (AR/AC) and

sinusitis accounted for billions in health care costs in 1996, according to two recent studies.

Peter J. Gergen, M.D., M.P.H., of the Agency for Health Care Policy and Research participated in the studies, along with colleagues from the Medical Technology and Practice Patterns Institute, Georgetown University Medical Center, and Washington Hospital Center. They convened an expert panel to estimate the outpatient and inpatient visits with a primary or secondary

diagnosis of AR/AC in the first study and sinusitis in the second study. The researchers then used data from AHCPR's 1987 National Medical Expenditure Survey (inflated to 1996 dollars) to estimate total 1996 costs for both conditions.

The overall direct medical expenditures attributable to AR/AC were \$5.9 billion (\$1.9 billion for the primary diagnosis and \$4 billion for a secondary diagnosis). Outpatient services accounted for 63

continued on page 14

Costs of treating sinusitis

continued from page 13

percent (\$3.7 billion), medications for 25 percent (\$1.5 billion), and inpatient services for 12 percent (\$0.7 billion). Children 12 years and younger accounted for 38 percent (\$2.3 billion) of total costs.

Overall health care expenditures attributable to sinusitis were \$5.8 billion, of which 31 percent (\$1.8 billion) was for children 12 years or younger. A primary diagnosis of acute or chronic sinusitis accounted for 59 percent of all expenditures

(\$3.5 billion). About 12 percent of each of the costs for asthma and chronic otitis media (middle ear infections) and eustachian tube disorders were attributed to diagnosis and treatment of comorbid sinusitis (sinusitis as a secondary diagnosis). The researchers conclude that upper airway disorders need to be recognized as serious, debilitating, costly diseases that warrant precise diagnosis and effective, specific therapy.

Details of the two studies are in "Direct expenditures for the treatment of allergic

rhinoconjunctivitis in 1996, including the contributions of related airway illnesses," and "Healthcare expenditures for sinusitis in 1996: Contributions of asthma, rhinitis, and other airway disorders," by Nancy F. Ray, M.S., James N. Baraniuk, M.D., Mae Thamer, Ph.D., and others, in the March 1999 *Journal of Allergy and Clinical Immunology* 103, pp. 401-407, and 408-414, respectively. Reprints are available (AHCPR Publication Nos. 99-R069 and 99-R068, respectively) from AHCPR.** ■

Investor-owned and tax-exempt hospitals differ in their approach to diversification of services

The growth of managed care and the aging population have made subacute inpatient care a potentially attractive market for general acute care hospitals that wish to diversify their services. Hospitals that diversify into subacute care might offer such services as rehabilitation, skilled nursing care, hospice care, and other long-term care; treatment for psychiatric problems and chemical dependency; care for mentally retarded individuals or those with chronic diseases; and other specialized health care services.

Despite the potential benefits of branching out into subacute care, not all hospitals are pursuing this strategy and may not be equally good candidates for such diversification, according to a recent study. The study was supported by the Agency for Health Care Policy and Research (HS07047) and led by principal investigator Jeffrey Alexander, Ph.D., of the University of Michigan.

Dr. Alexander and his colleagues found significant differences in the average level of subacute care offered by investor-owned (IO) versus tax-exempt not-for-profit (NFP) hospitals. After controlling for selection bias,

financial performance, risk, size, occupancy, and other variables, IO hospitals offered 31 percent less subacute care than NFP hospitals. Resource availability, as measured by hospital size, membership in a multihospital system, and the supply of nursing professionals, appeared to expedite the move into subacute care for both types of hospitals.

However, IO hospitals were more responsive than NFP hospitals to financial conditions in their decisions to invest in subacute care. IO hospitals that experienced relatively low financial returns began to offer more subacute services than more profitable IO hospitals. Among NFP hospitals, however, no relationship was found between measured financial returns and diversification into subacute care.

For more information see "Financial and organizational determinants of hospital diversification into subacute care," by John R.C. Wheeler, Ph.D., Jeffrey Burkhardt, Ph.D., Dr. Alexander, and Stephen A. Magnus, M.S., in the April 1999 issue of *Health Services Research* 34(1), pp. 61-81. ■

Managed Care

Managed care has spread from the United States to Latin America with an uncertain effect on quality and access to care

With increasing saturation of the managed care market in the United States, many managed care organizations (MCOs) are exporting their managed care product to Latin America for substantial profits. For instance, overall revenues from managed care in Brazil during 1995 were nearly \$3 billion. Access to large pension funds that support health insurance systems, fewer restrictions compared with the United States, and a surplus of Latin American doctors who are willing to work for relatively low wages are just a few of the incentives. But the impact of managed care on health care access and quality in Latin America remains uncertain, concludes a study supported by the Agency for Health Care Policy and Research (HS09703) and led by Howard Waitzkin, M.D., Ph.D., and Celia Iriart, Ph.D., of the University of New Mexico, Albuquerque.

A review of articles on the exportation of managed care from 1980 through 1998, as well as interviews with top executives and a review of Web pages and annual

reports of international corporations, financial institutions, and government agencies revealed that required copayments have introduced barriers to care. In Chile, each year about 24 percent of patients covered by MCOs receive services in public clinics and hospitals because they cannot afford copayments. Lengthy means testing to qualify for free care at self-managed public hospitals of Argentina and Brazil has resulted in an average 30 to 40 percent rejection rate at some hospitals. The researchers conclude that the outlook for the people of Latin America is not necessarily favorable. The executives responsible for the exportation of managed care have emphasized its financial rewards and have rarely considered preventive care or quality control, goals that have historically been valued by some HMOs in the United States.

As noted in an accompanying editorial by Eliseo J. Perez-Stable, M.D., of the AHCPR-funded MEDTEP Research Center for Minority Populations at the University of California, San Francisco, MCOs can operate in

Latin America with fewer restrictions than in the United States. Controversial practices that affect physicians' relations with MCOs in the United States—such as the use of financial incentives to limit care—are not issues in Latin America. Dr. Perez-Stable points out that the presence and continuing growth of managed care could represent a major advance for the health of the people of Latin America if it leads to the establishment of health systems that emphasize the coordination of care and the MCOs make a commitment to medical education and research. Unfortunately, concludes Dr. Perez-Stable, that is not the current situation.

See "The exportation of managed care to Latin America," by Karen Stocker, M.A., Dr. Waitzkin, and Dr. Iriart, in the April 8, 1999 *New England Journal of Medicine* 340(14), pp. 1131-1136; and "Managed care arrives in Latin America," by Dr. Perez-Stable, same issue, pp. 1110-1112. ■

Doctors who feel pressured by insurers to reduce services are more apt to be dissatisfied with medical practice

Managed care plans typically use financial incentives to influence physicians to use fewer health resources. However, many doctors are not particularly satisfied with this arrangement, suggests a study supported in part by the Agency for Health Care Policy and Research (HS09196). Doctors who perceive moderate or strong incentives by managed care plans to reduce health services are more apt to be dissatisfied with the practice of medicine, feel they have less freedom to care for patients the way they would prefer, and feel they have less professional autonomy to practice good medicine.

Although financial incentives to reduce services are not widespread, there is a legitimate reason to be concerned about possible adverse effects on the quality of care, notes Jack Hadley, Ph.D., of Georgetown University Medical Center. Dr. Hadley and his colleagues conducted a 1997 telephone survey of 1,549 physicians located in 75 large metropolitan areas. About 15 percent of doctors surveyed perceived a moderate or strong incentive to reduce services; 70 percent reported a neutral incentive; and 15 percent reported an incentive to increase services. Compared with doctors with a neutral

continued on page 16

Physician satisfaction

continued from page 15

incentive, those who felt an incentive to reduce services were from 1.5 to 3.5 times more likely to be very dissatisfied with their practices and were 0.2 to 0.5 times as likely to report that their expectations regarding professional autonomy and ability to practice good quality medicine were met. They were also 0.2 to 0.6 times as likely to report having the freedom to care for patients the way they would like, such as sufficient time

with patients, ability to hospitalize patients, ability to order tests and procedures, and ability to make referrals.

See "Perceived financial incentives, HMO market penetration, and physicians' practice styles and satisfaction," by Dr. Hadley, Jean M. Mitchell, Ph.D., Daniel P. Sulmasy, M.D., Ph.D., and M. Gregg Bloche, M.D., J.D., in the April 1999 *Health Services Research* 34(1), pp. 307-321. ■

Researchers examine impact of managed care on hospital-physician relationships and types of services offered

Managed care and shifts to more outpatient than inpatient care in the United States have left hospitals scrambling to integrate services and seek partnerships with physicians, as well as to diversify services into potentially profitable care areas. Hospitals seek partnerships with physicians to accept and manage risk, to foster collaboration, and ultimately, to provide more cost-effective care. However, the potential of such partnerships to change the structure and behavior of hospital-physician relationships toward greater integration has been greatly overstated, concludes a study by Michael A. Morrissey, Ph.D., of the University of Alabama at Birmingham, and supported by the Agency for Health Care Policy and Research (HS09183). A second study of his, supported by the same grant, suggests that urban hospitals engage in clinical integration with greater frequency than rural hospitals.

Morrissey, M.A., Alexander, J., Burns, L.R., and Johnson, V. (1999). "The effects of managed care on physician and clinical integration in hospitals." *Medical Care* 37(4), pp. 350-361.

Many argue that to be successful in garnering managed care contracts, hospitals and physicians must realign their incentives to increase

efficiency, attract a larger slice of the shrinking inpatient pie, and substitute effective outpatient care for more costly inpatient services. Yet the relationship between managed care and physician and clinical integration is relatively modest. Much of the realignment under managed care has been limited to certain types of efforts. These range from fairly innocuous efforts, such as providing practice support for physicians, to tighter forms of integration, such as ownership of physician practices, note the study's authors.

They analyzed responses of 1,495 hospitals that completed the 1993 Hospital-Physician Relationship Survey, augmented with data from other sources. They used factor analysis to reduce 23 integration variables into 5 physician and 3 clinical integration factors. The researchers found that, other things being equal, physician involvement in hospital management and governance increased with managed care involvement. This arrangement represents a path of least resistance that is relatively easy to effect and does not require significant capital outlay by the physician or hospital. This approach also implies power sharing and may signal to physicians that hospital management desires a true partnership with affiliated physicians.

To a lesser degree, the use of physician organization arrangements and other joint ventures also increased under managed care. Practice management and support services were actually lower in hospitals with high managed care activity. Other forms of physician and clinical integration appeared to be unrelated to managed care and varied more as a function of hospital size, system affiliation, and selected market characteristics.

Alexander, J.A., Morrissey, M.A., Burns, L.R., and Johnson, V. (1998, Fall). "Physician and clinical integration among rural hospitals." *Journal of Rural Health* 14(4), pp. 312-326.

From the physician's perspective, managed care and competition from alternative providers have increased the risks of solo practice and forced many physicians into groups. These groups often look to hospitals for capital, practice management expertise, and partnerships for managed care contracting. Interdependencies between hospitals and physicians in rural areas are often greater than in urban markets. Rural physicians typically have fewer hospitals in which to practice, thus creating greater dependence on a single hospital. Similarly, a rural hospital often depends on a handful of key physicians who admit patients

continued on page 17

Managed care and hospital structure

continued from page 16

to the hospital to sustain its operations.

Nevertheless, rural hospitals engage in clinical integration less often than their urban counterparts and emphasize different strategies for physician integration. All three measures of clinical integration—information integration, product line organization, and use of clinical guidelines—were practiced more frequently among urban hospitals

than rural hospitals. These strategies are often implemented in response to managed care pressures to standardize treatment and provide more cost-effective care, pressures that are not as palpable in rural areas.

Two physician integration approaches—physician involvement in hospital management and governance, and networking and joint ventures—were practiced with greater frequency among urban hospitals compared with rural hospitals. There were no differences in three measures of physician

integration: use of salaried physicians and ownership of group practices, cost information sharing, and provision of support services to physicians. Also, physician integration approaches in rural hospitals were more common among larger rural hospitals and among those close to urban facilities, with system affiliations, and not under public control. These findings are based on data drawn from the 1993 Hospital-Physician Relationship survey, 1993 American Hospital Association Annual Survey of Hospitals, and other data. ■

Rural Health

Joining a hospital network may improve the fiscal viability of rural hospitals

Dramatic health care system changes have prompted more than 300 rural hospitals to close in the past decade. Joining a hospital network may well improve the fiscal performance and perhaps viability of rural hospitals, concludes a study supported in part by the Agency for Health Care Policy and Research (HS08633). It found that Oklahoma rural hospitals that belonged to hospital networks tended to have lower net operating, labor, and other costs, lower costs for supplies, and fewer personnel than hospitals not in a network.

Participation in networks enables hospitals to cooperate in activities such as marketing, recruiting staff, purchasing equipment, developing clinics, converting capacity, or sharing staff, which aid their financial viability, explains Robert W. Broyles, Ph.D., of the University of Oklahoma Health Science Center. Dr. Broyles and colleagues in the Oklahoma Rural Research and Demonstration Center analyzed data from two surveys of rural hospitals in the State: the Survey of Rural Hospitals in Networks (SRHIN) and the Hospital

Utilization and Planning Survey (HUPS). They examined differences in the fiscal performance between 26 hospitals that were not members of a network and 34 hospitals that participated in networks from 1990 to 1995.

About 61 percent of network hospitals described their fiscal performance as poor or average prior to joining a network, while 39 percent reported their financial performance as good. Half of the hospitals responding to the SRHIN indicated that their network membership improved their fiscal performance. When compared with nonparticipants, network hospitals were able to improve their net cash flow by incurring lower net operating costs rather than by generating higher patient revenues.

More details are in "Networks and the fiscal performance of rural hospitals in Oklahoma: Are they associated?" by Dr. Broyles, Edward N. Brandt, Jr., M.D., Ph.D., and Diane Biard-Holmes, M.S.W., in the Fall 1998 *Journal of Rural Health* 14(4), pp. 327-337. ■

Conference attendees outline research agenda for community and migrant health centers

Changes in health care financing will affect the future of community and migrant health centers (C/MHCs). For example, the shift to managed care in State Medicaid programs and the growing number of uninsured people will challenge the abilities of C/MHCs to provide a safety net of health care in their communities. The Agency for Health Care Policy and Research (HS09364) supported a conference on this topic for health care practitioners and university-based researchers, which was held July 17-18, 1997, in Kansas City, MO. The goal of the conference was to build a research agenda that is responsive to the needs of C/MHCs. Research ideas were classified into three general categories: outcomes research, managed care applications and finance issues, and service delivery.

The following outcomes research priorities were identified as most important: patient satisfaction with CHC services; effectiveness of special, targeted programs to address health improvement, especially those that rely on patient compliance; the impact of the health center on the health status of the people served and the community; the impact of enabling services, such as transportation and language translation, on health outcomes; and differences in patient outcomes related to differences in access to specialists.

Discussion of managed care and finance issues focused on research to understand how changes in finance will affect total center operations. These included the impact of direct contracting with Medicaid or others on center finances, clinical services, and on the ability to network with

other providers. Participants also gave priority to research on the effects of changes in finance on access to care—for example, for counties with or without a C/MHC—or for patients enrolled in C/MHC managed care plans compared with other managed care providers. Service delivery outcomes research priorities ranged from the role of grant support in sustaining C/MHC activities to the role of clinicians in C/MHC decisionmaking.

See “Building a research agenda: Responding to the needs of community and migrant health centers,” by Keith J. Mueller, Ph.D., Thomas Curtin, M.D., Daniel Hawkins, and others, in the Fall 1998 issue of the *Journal of Rural Health* 14(4), pp. 289-294. ■

AHCPR News and Notes

AHCPR to fund centers of excellence for research on health care markets and managed care

John M. Eisenberg, M.D., Administrator of the Agency for Health Care Policy and Research, has announced the agency's plans to spend up to \$11 million over 5 years to support two to three centers of excellence for health care market and managed care research. The studies conducted by these centers will help public policymakers understand, monitor, and anticipate how changes in the Nation's market-driven health care system affect costs, access to services, and quality of care. Some of the studies are expected to look at the impact of these changes on rural and minority populations. The request for applications (RFA) released on June 23, 1999, by AHCPR calls on interested investigators to submit letters of intent by September 2, 1999, and to apply for the research program grants by November 10, 1999.

Under a 1995 initiative, AHCPR supported 11 studies on the impact of major changes in health care markets.

Findings from these studies about changes in physician labor force participation and income, hospital mergers and integrations, and the structure of health insurance markets are now informing the decisions of Federal and State policymakers. Over the past few years, however, health care markets have become increasingly complex. Costs appear to be rising again, and some HMOs are withdrawing from Medicaid and Medicare programs. For-profit ownership is increasing, and some hospital-health plan mergers from the past are being dissolved. Also, new consolidations are producing complex multiproduct, multimarket health plans and diversified provider networks. Moreover, employers and health care coalitions are having greater impact on the shape of health care markets than before.

continued on page 19

New RFA on market forces

continued from page 18

On the other hand, some things are not changing. For example, access to health care continues to be a problem in rural markets, and racial and ethnic disparities in health outcomes and quality persist. Policymakers in both the public and private sectors need further information so they can forge sound policies and strategies in response to both market changes and persistent problems.

Each center funded under this RFA will undertake several interrelated projects that revolve around a general theme conceived by the principal investigator. Within the limits of the theme, individual projects will address provider and health plan behavior, purchaser behavior, access to care by people who belong to ethnic and racial minority groups, and rural health markets. AHCPR expects applicants to use existing data sources, including administrative data and other available data that track market transactions.

Investigators are expected to disseminate their research beyond the peer-reviewed literature. They will build methodologies into the grants to accomplish a broader dissemination to public policy audiences, and AHCPR staff will assist in these efforts by periodically organizing public policy conferences to disseminate

findings and other products developed under this initiative.

AHCPR expects to begin funding these new projects by May 2000. Each center will receive \$750,000 to \$1 million in AHCPR funds the first year, with comparable levels of support for years 2 through 5. Eligible organizations include public or private nonprofit organizations, such as universities, clinics, State and local government agencies, and Federal government agencies. For-profit organizations are not eligible, but they may participate in the research project grants as members of consortia or as subcontractors.

For more information and application instructions, see "Healthcare Markets and Managed Care," (RFA-HS-00-001) in the June 23, 1999 *NIH Guide for Grants and Contracts* online at www.nih.gov/grants/guide/rfa-files. Or visit AHCPR's Web site and click on "Funding Opportunities." A companion piece, *AHCPR Guidelines for the Research Program Project Grant*, also can be found at AHCPR's Web site. Copies of the Request for Applications, along with application forms and instructions, are also available from AHCPR's contractor, Equals Three Communications, Inc., 7910 Woodmont Ave., Suite 400, Bethesda, MD 20814-3015, phone 301-656-3100 or fax 301-652-5264. ■

Announcements

AHCPR unveils its updated health care quality improvement database

The Agency for Health Care Policy and Research has released an expanded, more user-friendly version of its quality improvement database CONQUEST (Computerized Needs-Oriented Quality Measurement Evaluation System). This new version, CONQUEST 2.0, includes more clinical performance measures and medical conditions than the previous version, as well as new information on how to select and apply the measures.

This database will help health care and quality improvement professionals quickly identify, understand, compare, evaluate, and

select measures to assess and improve clinical performance in acute, ambulatory, long-term, and home health care settings. The measures cover children and adults and include many different common and costly diagnoses and conditions, which are, in turn, linked with evidence-based treatment guidelines.

This database can help users compare clinical performance within and across an organization, establish benchmarks and identify best practices, target opportunities for quality improvement, and measure changes in quality over time. CONQUEST 2.0 includes new measure sets, including RAND's

hysterectomy measures on assessing appropriate procedures and HCFA's Cooperative Cardiovascular Project and Pneumonia Module from the Medicare Quality Indicator System. In addition to new measure sets, others have been updated, such as the National Committee on Quality Assurance's HEDIS measure set and the HCFA/University of Wisconsin's nursing home quality measures.

This updated version brings together a vast number of measures in a sophisticated, accessible, computerized package. It consists of linked databases that are made up of

continued on page 20

Updated version of CONQUEST

continued from page 19

clinical performance measures and conditions. The conditions database includes 57 medical conditions, such as cancer, cataracts, gallbladder disease, heart attack, hypertension, and pregnancy. The clinical performance measures database comprises 1,197 measures, such as percentage of patients with a heart attack who are discharged on beta blockers, percentage of nursing home residents diagnosed with depression who do not receive

antidepressant therapy, and percentage of patients with pneumonia who receive correct antibiotics.

Measures included in the database were contributed by many different developers, including the American Group Practice Association, the Center for Clinical Quality Evaluation, the Department of Veterans Affairs, the Joint Commission on Accreditation of Healthcare Organizations, the Maryland Hospital Association, and the Pacific Business Group on Health.

The CONQUEST 2.0 database and its *User's Guide* and *Quick Start Summary* can be downloaded directly from AHCPR's Web site at <http://www.ahcpr.gov/qual/conquest.htm>. The set of disks (AHCPR Publication No. 99-DPO1) and printed copies of the *User's Guide* (AHCPR Publication No. 99-0011) and *Quick Start Summary* (AHCPR Publication No. 99-0015) are available from AHCPR.*

For free technical assistance and more information about CONQUEST 2.0, contact Marge Keyes at 301-594-1824 or by e-mail to mkeyes@ahcpr.gov. ■

AHCPR expands public access to two hospital databases

As part of the Agency's continuing effort to facilitate public use of AHCPR databases, we have enhanced access to two databases on hospital stays. Both databases are components of the Healthcare Cost and Utilization Project (HCUP), which is a family of administrative, longitudinal databases and related software developed and maintained by AHCPR in partnership with States and private data organizations.

HCUP data are used for research on hospital utilization, access, charges, quality, and outcomes. The data can be used to describe patterns of care for both common and uncommon diseases, analyze hospital procedures, and study the care of particular populations, including minorities, children, women, the elderly, and the uninsured. Researchers and policymakers use HCUP data to identify, track, analyze, and compare trends at the national, regional, and State levels.

The first set of data, the State Inpatient Database (SID), is a collection of individual data sets from 19 participating States; each data set contains the universe of that State's hospital discharge abstracts. The data have been translated into a uniform format to facilitate cross-State comparisons. SID represents more than half of all U.S. hospital discharges, and State participation is growing.

The second database, the Nationwide Inpatient Sample (NIS), is a stratified probability sample of hospitals drawn from the SID. The NIS is designed to approximate a 20 percent sample of U.S. community hospitals, including roughly 6.5 million discharges from about 900 hospitals. NIS is the largest all-payer inpatient database in the United States, and data are now available from 1988 to 1996.

In addition to purchasing the NIS database, an option that has been in place for the last 5 years, users can now access selected 1996 NIS data in an interactive format on HCUPnet, which can be found on the AHCPR Web site. HCUPnet accommodates real-time queries of the NIS database, providing information on number of discharges, length of stay, charges, and in-hospital mortality for diagnoses and procedures by selected patient and hospital characteristics. See next article (page 21) for more information on HCUPnet.

The SID and NIS contain over 100 variables, including principal and secondary diagnoses and procedures; admission and discharge status; patient demographics; expected payment source; total charges; length of stay; hospital characteristics; and hospital and county identifiers that permit linkages to other databases.

The NIS and SID data sets can be run on desktop computers with a CD-ROM reader; NIS and SID are in ASCII format for ease of use with various off-the-shelf software products, including SAS and SPSS. Programs are provided for converting ASCII files. The NIS data set includes full documentation in Adobe Acrobat and weights for producing national and regional estimates.

For more information about NIS, SID, and companion software tools, visit the AHCPR Web site at <http://www.ahcpr.gov/>. NIS may be purchased from the National Technical Information Service.*** See the back cover of *Research Activities* for contact information. Information on purchasing the SID will be available on the AHCPR Web site later this summer. Questions about HCUP products may be sent via e-mail to hcup@ahcpr.gov. ■

New online service offers quick answers to questions about hospital care

The Agency for Health Care Policy and Research has just made available a free new interactive online service—HCUPnet—that permits policymakers, researchers and others to send questions about inpatient hospital care in the United States over the Internet and receive answers within seconds. HCUPnet can be used to answer questions about use of inpatient care, charges, quality of care, patient outcomes, and access to care.

The new service can be accessed online through AHCPR's Web site. Users can choose specific conditions, disease groups, or

procedures and then request information relating to their choice, such as length of stay, total charges, and discharge status—including in-hospital deaths. HCUPnet users can narrow their queries by, for example, selecting categories such as patient insurance status, age, or sex, or by selecting hospital characteristics, such as teaching status or ownership category. Most questions can be answered in 5 seconds or less. For more information or to access HCUPnet, visit AHCPR's Web site or send an e-mail to hcup@ahcpr.gov.

The data source for HCUPnet is the 1996 Nationwide Inpatient Sample (NIS) of the Healthcare Cost

and Utilization Project (HCUP). This project, which represents the fruits of a partnership between AHCPR, individual States, and the hospital industry, has produced the largest source of data on the use, quality, and costs of inpatient care for all patients hospitalized in the United States. The NIS database contains information drawn from roughly 6.5 million hospital stays at over 900 hospitals in 19 States. Included are hospital stays covered by Medicare, Medicaid, and private insurance and stays that are not covered by a third-party payer. ■

New MEPS chartbook of nursing home data is now available from AHCPR

The Agency for Health Care Policy and Research has published a new chartbook presenting characteristics of nursing home facilities, special care units, and their residents. The chartbook was released by AHCPR at the June 1999 annual meeting of the Association for Health Services Research in Chicago. *Nursing Home Trends, 1987 and 1996*, features findings from AHCPR's 1996 Medical Expenditure Panel Survey (MEPS) and 1987 National Medical Expenditure Survey Institutional Population Component.

Using a question-and-answer style—along with charts and graphs—the chartbook provides information about nursing homes and their residents in 1996 compared with information about the nursing home market in 1987. Significant findings include:

- In 1996, nursing homes served an older population than they did in 1987. From 1987 to 1996, the proportion of nursing home residents who were 85 and over rose from 49 percent to 56 percent for women and from 29 percent to 33 percent for men.
- Both the number of nursing homes and the number of nursing home beds increased almost 20 percent from 1987 to 1996, from 14,050 homes with 1.48 million beds in 1987 to 16,840 homes and 1.76 million beds in 1996.

- Residents were more functionally disabled in 1996 than in 1987. The number of nursing home residents who needed help with three or more activities of daily living (bathing, dressing, eating, using the toilet, etc.) increased from 72 percent in 1987 to 83 percent in 1996.
- Male residents were more likely to be married when entering a nursing home in 1996 than in 1987, from 24.8 percent in 1987 to 34.3 percent in 1996. There was very little change in the marital status of female residents during that time. In both years, almost three-fourths of women—but only one-third of men—were widowed at the time of the survey.
- In 1996 the most common type of special care unit was for treatment of Alzheimer's disease and related dementias. Most Alzheimer's units are relatively new; only 10 percent have been operating for more than 10 years. There are no 1987 data available on special care units.
- Between 1987 and 1996, there was a trend away from traditional nursing homes toward nursing homes that included assisted or independent living beds in addition to traditional nursing home beds. The proportion of nonnursing beds rose from 6.9 percent in 1987 to 11.3 percent in 1996.

continued on page 22

MEPS nursing home data

continued from page 21

Nursing Home Trends, 1987 and 1996, (AHCPR Publication No. 99-0032) is available from AHCPR.** This is the third chartbook of MEPS data to be released by AHCPR. Two other chartbooks—*Children's Health, 1996* (AHCPR Publication No. 98-0008) was released in March 1998 and *Racial and Ethnic Differences in Health, 1996* (AHCPR Publication No. 99-0001)—was released in February 1999.

Editor's note: AHCPR also released tables of data from the insurance component of MEPS, which provide

national information on health insurance costs and characteristics in 1996 and State-by-State breakdowns for the 40 most populous States. The tables include estimates of health insurance premiums, contributions, enrollments, offerings, take-up rates, and self-insured rates. The tables are based on data collected from a nationally representative sample of private-sector employers. At this time, the tables are available only through the AHCPR Web site. Later this summer, AHCPR will release the tables on CD-ROM. To preorder the CD-ROM (AHCPR Publication No. 99-DP07), send an e-mail to mepsd@ahcpr.gov or call the AHCPR Publications Clearinghouse at 1-800-358-9295. ■

AHCPR funds new study on treating depression in teenagers

The Agency for Health Care Policy and Research has awarded a 4-year, \$2.3 million grant to the Kaiser Permanente Center for Health Research in Portland, OR, to find a more effective way of treating depression in teenagers seen in managed care practices—the source of health care for most Americans.

The new award is one of five grants totaling nearly \$10 million in projected funding—over half of which comes from AHCPR—made in response to a child mental health research solicitation published in 1998. The call for research was published by AHCPR in conjunction with the Substance Abuse and Mental Health Services Administration (SAMHSA), the National Institute of Mental Health (NIMH), and the National Institute on Drug Abuse.

As noted by AHCPR Administrator John M. Eisenberg, M.D., this study is particularly important because of recent questions raised about the possible relationship between teen mental health problems and school violence. Over 8 percent of teenagers suffer from depression—the most common mental disorder in the United States. Not only is depression becoming more prevalent in adolescents, but

the age at which it first appears is going down.

A major concern is suicide. Over the last decade, the suicide rate in young people has increased dramatically, and by 1996, the last year for which data are available, it ranked as the fourth leading cause of death among 10-to-14-year-old children, and it was third among those aged 15 to 24. Depression can cause loss of energy and problems in concentrating, thinking, and remembering, and it increases the risk of problems such as teenage pregnancy, school dropout, and accidents.

Under the terms of AHCPR's new grant award, a team of researchers led by Gregory N. Clarke, Ph.D., an internationally recognized expert on cognitive behavioral therapy for depressed youths, will examine the effectiveness of the therapy—a form of psychotherapy with proven efficacy—when used as an adjunct to antidepressant medication therapy to treat adolescents ages 12 to 18 who are experiencing depression for the first time. The researchers will test whether adolescents provided this combined therapy will be more likely to adhere to medication instructions, recover faster from initial depression, stay in remission longer, function better socially and academically, and be more satisfied

with their treatment than those treated only with medication.

The researchers also predict that, while the combination may initially cost managed care more money, in the long run it will be more cost effective than the current way of treating depressed adolescents. The randomized clinical trial will be conducted in four large managed care practices in the Northwest that provide primary care, and it will involve the teaming of pediatricians and trained mental health therapists.

The other child mental health studies are:

- Youth Partners in Care, AHCPR grant HS09908, led by Joan R. Asarnow, Ph.D., of the University of California, Los Angeles. This AHCPR-funded project is examining the impact of a program designed to improve the outcomes of mental health care for children in managed care practices and reduce their families' stress by educating them and their primary care physicians about depression treatment.
- Treating Oppositional Defiant Disorder in Primary Care, grant MH59462, funded jointly by AHCPR and NIMH. This

continued on page 23

Depression in teenagers

continued from page 22

research is being led by John V. Lavigne, Ph.D., of Chicago's Children's Memorial Hospital. The study is testing the effectiveness of a psychological intervention in primary pediatric care designed to help identify and treat preschool children with oppositional defiant disorder.

This is the most common psychiatric disruptive behavior in preschool-aged children, and it has long-term consequences ranging from delinquency and substance abuse to high-risk sexual behavior in adolescence.

- The final two studies are (1) Enhancing ADHD (Attention Deficit Hyperactivity Disorder) Treatment Effectiveness in

Pediatrics and Schools, grant MH59461, led by Mark L. Wolraich, M.D., of Vanderbilt University and funded by NIMH; and the Effectiveness of Interpersonal Psychotherapy (IPT-A) in School-Based Health Clinics, grant SM52671, led by Laura H. Mufson, Ph.D., of Columbia University, and funded by SAMHSA. ■

AHCPR announces MEPS workshops

The Agency for Health Care Policy and Research will host a series of three, 3-hour workshops in the fall of 1999 to enhance the use of data from AHCPR's Medical Expenditure Panel Survey (MEPS). The workshops will help health services researchers and others who use MEPS data understand the unique analytic opportunities provided by MEPS, as well as the complexities of MEPS data file linkages.

The first workshop will be held at AHCPR's Rockville, MD, headquarters in September 1999; a second workshop will be held in Chicago in conjunction with the annual meeting of the American Public Health Association (APHA) in November 1999; and the third workshop is planned for December in conjunction with the International Conference on Health Policy Statistics in Santa Monica, CA. The schedule and registration information are listed in the box.

In addition, AHCPR is planning a 3-day workshop to be held in spring 2000. This workshop will include a 2-day session on working with the MEPS Household Component data and a 1-day session focused on working with the MEPS Nursing Home Component data. Participants in this workshop will also have the

opportunity to do hands-on programming during the daily lab sessions. Information on registration and workshop content will be announced in *Research Activities* as it becomes available.

MEPS is a vital new resource designed to continually provide health service researchers, policymakers, health care administrators, businesses, and others with timely, comprehensive information about health care use

and costs in the United States and to improve the accuracy of their economic projections. The MEPS Household Component includes a core questionnaire with periodic supplements, a medical provider survey, and an insurance survey.

Please e-mail questions or comments about the workshops to Nancy Krauss: nkrauss@ahcpr.gov ■

MEPS Workshop Schedule

Date and Time	Location	Registration Information
September 24, 1999 9:00 am -12:30 p.m.	AHCPR Rockville, MD	Self-registration via e-mail mepsdp@ahcpr.gov Registration due by August 13, 1999 (no fee)
November 6, 1999 8:30 a.m. - 12:00 p.m.	American Public Health Association (APHA) Annual Meeting Chicago, IL	Meeting registration required plus a \$50.00 fee for three continuing education credits. Visit APHA Web site for registration information www.apha.org
December 5, 1999 9:00 a.m. - 12:00 p.m.	International Conference on Health Policy Statistics Santa Monica, CA Sponsored by the American Statistical Association (ASA)	Conference registration required; no additional fee for workshop attendance. Visit the ASA Web site for registration information www.amstat.org

Connecting Ethics and Health Policy

Pooks Hill Marriott, Bethesda, MD, October 1, 1999

If you are working in the areas of health policy, medical ethics, and/or health services research, you will be interested in this 1-day conference. Presenters and participants will focus on the ethical dilemmas now facing the health care industry and those on the horizon. A goal of the conference is to identify opportunities for conceptual and empirical research that will inform health care policy.

The conference is being sponsored by the Agency for Health Care Policy and Research, the Department of Clinical Bioethics at NIH's Clinical Center, and the Robert Wood Johnson Foundation.

For more information, contact Terri Jacobs at the Department of Bioethics, phone 301-496-3822, fax 301-496-0760. ■

New projects funded

The following research and conference grants were funded recently by the Agency for Health Care Policy and Research. Readers are reminded that findings usually are not available until a project is nearing completion.

Research Projects

Adult Medicaid patients' dental visits in emergency departments

Project director: Leonard A. Cohen, D.D.S.
Organization: University of Maryland
Baltimore, MD
Project number: AHCPR grant HS10129
Project period: 7/1/99 to 9/30/00
Funding: \$139,853

Effects of a nursing-based intervention in two EDs

Project director: Lorraine C. Mion, Ph.D.
Organization: Cleveland Clinic Foundation
Cleveland, OH
Project number: AHCPR grant HS09725
Project period: 6/1/99 to 5/31/01
First year funding: \$630,224

Fundamental measurement for health services research

Project director: William P. Fisher, Ph.D.
Organization: LSU Medical Center
New Orleans, LA
Project number: AHCPR grant HS10186
Project period: 7/1/99 to 12/31/99
Funding: \$37,883

Guideline to improve quality of initial pneumonia care

Project director: Michael J. Fine, M.D.
Organization: University of Pittsburgh
Pittsburgh, PA
Project number: AHCPR grant HS10049
Project period: 7/1/99 to 12/31/02
First year funding: \$1,008,194

HMO collaborative care treatment for depressed youth

Project director: Gregory N. Clarke, Ph.D.
Organization: Kaiser Foundation Research
Institute
Oakland, CA
Project number: AHCPR grant HS10535
Project period: 6/1/99 to 5/31/03
First year funding: \$693,810

Managed care and quality: Children with chronic conditions

Project director: Frederick A. Connell, M.D.
Organization: University of Washington
Seattle, WA
Project number: AHCPR grant HS09948
Project period: 7/1/99 to 6/30/02
First year funding: \$413,093

Online commentary use and antimicrobial prescriptions

Project director: Rita Mangione-Smith, M.D.
Organization: University of California
Los Angeles, CA
Project number: AHCPR grant HS10187
Project period: 7/1/99 to 9/30/00
Funding: \$90,030

continued on page 25

New projects funded

continued from page 24

Preferences for short-term health states in radiology

Project director: Francois Sainfort, Ph.D.
Organization: University of Wisconsin
Madison, WI
Project number: AHCPR grant HS10277
Project period: 7/1/99 to 6/30/01
First year funding: \$236,959

Small Grants

Determinants of cesarean section: Explaining recent changes

Project director: A. Dale Tussing, Ph.D.
Organization: Syracuse University
Syracuse, NY
Project number: AHCPR grant HS10065
Project period: 6/1/99 to 5/31/00
Funding: \$70,929

Impact of continuity on quality of care for diabetes

Project director: James M. Gill, M.D.
Organization: Christiana Care Health Services
Wilmington, DE
Project number: AHCPR grant HS10069
Project period: 7/1/99 to 6/30/00
Funding: \$62,750

Mammography and detection-controlled estimation

Project director: Andrew N. Kleit, Ph.D.
Organization: Pennsylvania State University
University Park, PA
Project number: AHCPR grant HS10068
Project period: 7/1/99 to 6/30/00
Funding: \$66,537

Conference Grants

CEA and managed care: Maintaining the health of populations

Project director: Mark C. Hornbrook, Ph.D.
Organization: Kaiser Foundation Research
Institute
Oakland, CA
Project number: AHCPR grant HS10072
Project period: 8/1/99 to 7/31/00
Funding: \$30,001

Evidence-based health care workshop

Project director: Phoebe L. Barton, Ph.D.
Organization: University of Colorado
Denver, CO
Project number: AHCPR grant HS10073
Project period: 7/1/99 to 6/30/00
Funding: \$39,900

Public mental health outcomes risk-adjustment

Project director: Michael S. Hendryx, M.D.
Organization: Washington Institute of Mental
Illness Research and Training
Spokane, WA
Project number: AHCPR grant HS09851
Project period: 7/1/99 to 6/30/00
Funding: \$29,185 ■

Research Briefs

Justice, A.C., Covinsky, K.E., and Berlin, J.A. (1999, March). "Assessing the generalizability of prognostic information." (National Research Service Award training grant T32 HS00009). *Annals of Internal Medicine* 130(6), pp. 515-524.

Physicians are frequently asked to assess a patient's prognosis but often worry that their assessments will prove inaccurate. Prognostic systems have been developed to enhance the accuracy of such assessments. This paper describes an approach for evaluating prognostic systems based on the accuracy and generalizability of the system's prediction.

Generalizability of a prognostic system is commonly limited to a single historical period, geographic location, methodologic approach, disease spectrum, or followup interval. However, the more diverse the previous settings in which the system has been tested and found accurate, the more likely it will generalize to an untested setting, conclude these authors. They describe a working hierarchy of the cumulative generalizability of prognostic systems. Their approach is illustrated in a structured review of the Dukes and Jass staging systems for colon and rectal cancer and applied to a young man with colon cancer.

Sanders, G.D., Hagerty, C.G., Sonnenberg, F.A., and others. (1999). "Distributed decision support using a Web-based interface: Prevention of sudden cardiac death." (AHCPR grant HS08362). *Medical Decision Making* 19, pp. 157-166.

Decision models provide an analytic framework for representing the evidence, outcomes, and

preferences in a clinical decision. Authors of clinical practice guidelines increasingly depend on decision models to inform the guideline recommendations. However, the widespread use of decision models is often limited by the lack of platform-independent software that geographically dispersed users can access and use easily without extensive training. To address these limitations, the authors developed a Web-based interface for previously developed decision models. They describe the use and functionality of the interface using a decision model that evaluates the cost-effectiveness of strategies for preventing sudden cardiac death. The system allows an analyst to use a Web browser to interact with the decision model, and it also provides linkages to an explanation of the model.

Silber, J.H., Rosenbaum, P.R., Koziol, L.F., and others. (1999, April). "Conditional length of stay." (AHCPR grant HS06560). *Health Services Research* 34(1), pp. 349-363.

Hospital stays are likely to be prolonged when there are complications. By studying conditional length of stay (CLOS), one can determine when the rate of hospital discharge begins to diminish without the need to directly observe complications, according to this study. The authors derived the CLOS measure from the statistics and engineering reliability literature and applied it using data on pediatric appendectomy and pneumonia admissions. They analyzed abstracted records from 7,777 pediatric pneumonia cases and 3,413 pediatric appendectomy cases. They found that an extended pattern of

LOS by day 3 was associated with declining rates of discharge. This extended pattern coincided with increasing patient complication rates. Future validating studies will be required to determine whether variation in extended stay suggests inadequate management of complications or, conversely, thorough and complete medical care.

Zhou, X-H., Brizendine, E.J., and Pritz, M.B. (1999). "Methods for combining rates from several studies." (AHCPR grant HS08559). *Statistics in Medicine* 18, pp. 557-566.

Several independent groups often conduct studies to estimate a procedure's success rate. Researchers then may combine the results of these studies in the hopes of obtaining a better estimate for the true unknown success rate of the procedure. This paper presents two hierarchical methods for estimating the overall rate of success. Both methods take into account the within-study and between-study variation and assume that the number of successes within each study follows a binomial distribution given each study's own success rate. Both methods use the maximum likelihood approach to derive an estimate for the overall success rate and to construct the corresponding confidence intervals. The authors present an approach to estimating a confidence interval for the success rate when the number of studies is small and then perform a simulation study to compare the two methods. ■



Key Links:
[Your Guide to Choosing Quality Health Care](#)
[Put Prevention Into Practice](#)
[Attention Researchers: Grant Money Available!](#)

[Text Version]

AHCPR Year 2000 Outreach



What's New	How To Use This Web Site	Frequently Asked Questions	Información en español
About AHCPR	Overview, strategic plan, organization & key contacts, National Advisory Council	Search	
News & Announcements	Virtual newsroom, press releases, budget, speeches, job vacancies, general announcements	Browse	
Funding Opportunities	Grant announcements, notices, research training assistance, research agenda	Child Health	
Research Findings	Research Activities, children's & women's health, primary care, managed & long-term care, User Liaison Program	Department of Health & Human Services	
Quality Assessment	Quality measurement, CONQUEST, Consumer Assessment of Health Plans (CAHPS)		
Clinical Information	Evidence-based practice, clinical practice guidelines, preventive services, technology assessment, outcomes		
Consumer Health	Healthfinder, specific health conditions, surgery, prescriptions, health plans, health guides		
Data MEPS HCUP	Medical Expenditure Panel Survey, Healthcare Cost & Utilization Project, HIV Cost & Use, informatics standards		
Information Products	Availability & ordering, Government Information Locator Service (GILS), Web links, FOIA electronic reading room	Contact us at info@ahcpr.gov	

AHCPR: Improving Health Care Quality Through Research & Education

Visit AHCPR's Redesigned Web Site for the Latest Health Care Information and So Much More!

The Agency for Health Care Policy and Research's Web site — <http://www.ahcpr.gov/> — makes practical, science-based health care information available in one convenient location.

Now, the site is even easier to use. It has been redesigned with you in mind. The site has both a keyword search function and a new browse function that allow you to locate information on 37 topics, including children's health, evidence-based medicine, health insurance/access to care, managed care, market forces, outcomes research, quality of care, and women's health. The site features findings from AHCPR-supported research, information on funding opportunities and job vacancies, and online access to *Research Activities*.

Comments and suggestions are welcome. You can communicate with us about our Web site via e-mail at info@ahcpr.gov. Drop in and see what's new — we're only a point and click away.

<http://www.ahcpr.gov/>

Ordering Information

AHCPR makes documents available free of charge through its publications clearinghouse and AHCPR InstantFAX. Other AHCPR documents are available from the National Technical Information Service (NTIS) or the Government Printing Office (GPO). To order AHCPR documents:

(*) Available from the AHCPR Clearinghouse:

Call or write:

AHCPR Publications Clearinghouse
Attn: (publication number)
P.O. Box 8547
Silver Spring, MD 20907
800-358-9295
410-381-3150 (callers outside the
United States only)
888-586-6340 (toll-free TDD service;
hearing impaired only)

() Available from the AHCPR Clearinghouse and from AHCPR InstantFAX:**

For instructions on using InstantFAX, call 301-594-2800. You must call from a fax machine with a telephone handset. Use the key pad on the receiver when responding to prompts. AHCPR InstantFAX operates 24 hours a day, 7 days a week.

(*) Available from NTIS:**

To purchase documents from NTIS, call or write:

National Technical Information Service
(NTIS)
Springfield, VA 22161
703-605-6000, local calls
800-553-6847

Available from GPO:

Call the GPO order desk for prices and ordering information 202-512-1800.

Note: Please use publication numbers when ordering

U.S. Department of Health and Human Services

Public Health Service
Agency for Health Care Policy and Research
P.O. Box 8547
Silver Spring, MD 20907-8547



AHCPR Pub. No 99-0033
June 1999