AHRQ

Research Activities

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Highlights

Departments

Regular Features

Releasing medical study findings early has a downside

A new study by researchers at the Agency for Healthcare Research and Quality, Yale University, and Johns Hopkins University suggests that when medical trial results are released prior to journal publication, doctors can change their practice dramatically. However, the changes may not be in line with the detailed research results later published in a peer-reviewed journal and may be harmful to some patients.

Yale University's Cary Gross, M.D., who led the study, points out that a real balance must be struck between the public's demand for rapid information and publication in medical journals, an inherently slower process. Dr. Gross notes that health policymakers, medical journal editors, scientists, and the press have long debated whether it is in the public's best interest to release the results of clinical trials prior to publication in medical journals.

According to AHRQ researcher Claudia Steiner, M.D., a coauthor of the study, physicians may be able to judge how to use a new medical treatment better after they have read all the details in the full report published in the medical literature. Future research could focus on how clinical alerts—the method used for alerting clinicians early to trial findings—might be structured to preserve their advantage while avoiding any potential downside.

The researchers tracked the use of carotid endarterectomy (CEA)—a surgical procedure for clearing a diseased carotid artery in stroke-threatened patients—after the National Institutes of Health (NIH) disseminated the results of two clinical trials prior to journal publication. Each of the trials had been halted early because potentially life-saving benefits of CEA were found. Rather than waiting for the studies to be published in the medical literature, the NIH expedited dissemination of the results to physicians by means of clinical alerts. These alerts explained the findings of the studies, but also cautioned doctors that the trials included only patients under 80 years of age. NIH also cautioned that the trials had been conducted at medical centers with documented expertise in CEA, a highly complex procedure.

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Early release of research findings

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Immediately after the alerts were released, there was a substantial increase in CEA use in the States studied. The adjusted CEA use rate increased roughly 3 percent per month over the 6-month period following the issuance of the first alert in 1991. The rate of increase declined to only 0.5 percent per month after the clinical trial's findings were published later that year. Following the release in late 1994 of the clinical alert on the second CEA trial, the procedure's rate of use increased 7.3 percent per month over the next 7 months, but after the findings were published in May 1995, there was a decrease in the rate of use of 0.44 percent per month.

The study also found that the use of CEA following the second clinical alert was greater among patients over 80 years of age, despite the fact that these patients would not have been eligible for either trial because of their higher risk of complications and death. In contrast, following publication of the results in a medical journal, there was a greater decrease among those 80 and older, compared with patients under 80 years of age. The researchers also found that many patients were referred to hospitals with less experience in the use of CEA, despite the warnings of the clinical alerts.

The study used data from the State Inpatient Databases (SID) of California, Colorado, Florida, Illinois, New York, Pennsylvania, and Wisconsin. SID is part of the Healthcare Cost and Utilization Project (HCUP), a family of powerful State and national hospital databases built in partnership with 22 States and AHRQ.

For more information, see "Relation between prepublication release of clinical trial results and the practice of carotid endarterectomy," by Drs. Gross and Steiner, Eric Bass, M.D., and Neil Powe, M.D., in the December 13, 2000 *Journal of the American Medical Association* 284(22), pp. 2886-2893. Reprints (AHRQ Publication No. 01-R017) are available from AHRQ.** ■

Access to Care

Racial/ethnic disparities in health care access and use are not explained by health insurance and income

The existence of racial and ethnic disparities in health care has been well documented. Such disparities have been found across a broad range of health conditions and also in health insurance status, access to care, and use of health care services. Having a usual source of care is one marker used to measure access to care. According to a recent study, Hispanic Americans have become increasingly more likely to lack a usual source of care over the past 20 years, while black and white Americans saw few changes. Also, even though all racial and ethnic groups studied increased their number of outpatient visits during this time, there were increasing disparities in the number of these visits for both blacks and Hispanics.

The study addressed one popular myth regarding racial and ethnic differences in health care: that disparities among black, Hispanic, and white Americans can be explained wholly or in large part by disparities in income and health insurance coverage among these groups. One-half to three-fourths of the disparities observed in 1996 would have remained even if racial and ethnic differences in income and health insurance coverage were eliminated, according to Robin M. Weinick, Ph.D., Samuel H. Zuvekas, Ph.D., and Joel W. Cohen, Ph.D., of the Agency for Healthcare Research and Quality.

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Disparities in health care access

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The researchers analyzed data from a series of three nationally representative medical expenditure surveys (1977 National Medical Care Expenditure Survey, 1987 National Medical Expenditure Survey, and the 1996 Medical Expenditure Panel Survey) to explore racial and ethnic differences in access to and use of health care services from 1977 to 1996.

Overall, there was little change in the proportion of Americans who had no usual source of care, with only a slight increase from 15.2 percent in 1977 to 17.4 percent in 1996. However, after adjustment for health insurance, income, and other individual characteristics, blacks were 2.1 percentage points and Hispanics were nearly 10 percentage points more likely to lack a usual source of care than whites in 1996. Between 1977 and 1996, this disparity for blacks had declined by 3.2 percentage points, but the disparity for Hispanics had increased by 6.5 percentage points.

During this same period, the probability of using any outpatient care increased slightly for all Americans. There was no significant change in the disparity in use of outpatient care by blacks compared with whites from 1977 to 1996. However, for Hispanic Americans, there were considerable changes over the same time period. The disparity between Hispanics and whites in use of outpatient care increased even afer adjustments were made for health insurance and income. Most of the change occurred between 1977 and 1987, with the disparity at the end of the 20-year period measuring 8.8 percentage points.

For more information, see “Racial and ethnic differences in access to and use of health care services, 1977 to 1996,” by Drs. Weinick, Zuvekas, and Cohen, in the November 2000 *Medical Care Research and Review* 57 (Suppl. 1), pp. 36-54. Reprints (AHRQ Publication No. 01-R006) are available from AHRQ.* ■

Insurance status influences access to antihypertensive drug therapy, while personal factors influence patterns of use

Hypertension, a potent risk factor for heart attack and stroke, affects more than 50 million people in the United States and more than half of the elderly. Lifestyle changes, such as losing weight, increasing exercise, smoking cessation, and reducing use of salt and alcohol are usually tried before expensive antihypertension medications. When these measures are not enough, patients usually need medication to control their blood pressure.

A person’s insurance status has a striking effect on their access to antihypertensive drugs. Race/ethnicity and attitudes toward risk also influence access to drug therapy, as well as patterns of drug use and expenditures, according to a study supported by the Agency for Healthcare Research and Quality (HS09538).

AHRQ researcher, John F. Moeller, Ph.D., and his colleagues used data from the 1987 National Medical Expenditure Survey to identify 6,398 adults with hypertension as well as patient self-reports about use of antihypertensive medications to detect factors affecting patterns of drug use and expenditures. They found that privately insured patients were 59 percent (if nonelderly) or 163 percent (if elderly with Medicare) more likely to receive drug therapy than uninsured patients. Patients with Medicaid coverage were 126 percent more likely to receive drug therapy than uninsured patients.

Women and the elderly were more likely to obtain medications and spent more on them. Compared with patients

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characterized as low risk-takers, very high and high risk-takers were 38 percent and 24 percent less likely to be on antihypertensive therapy, respectively. Blacks were 30 percent more likely to be on drug therapy than whites, but they had lower annual expenditures for antihypertensive drugs. Minorities are either given different treatments or are more price-sensitive, given their lower insurance coverage. Severely overweight individuals were 62 percent more likely than patients of normal weight to be on drug therapy and also spent more on antihypertensives, either due to more prescriptions or more costly drug therapies.

See "Patterns and costs for hypertension treatment in the United States," by Christine Huttin, Dr. Moeller, and Randall S. Stafford, in the September 2000 *Clinical Drug Investigations* 20(3), pp. 181-195. Reprints (AHRQ Publication No. 01-R003) are available from AHRQ.** ■

Enhanced access to care for rural and disadvantaged patients may be a by-product of the high cost of a medical education

Four-year medical school tuition and fees are typically $50,000 to $100,000, and many students and young physicians are worried about their financial situations. In fact, 80 percent of generalist physicians surveyed last year said they obtained loans for all or part of their training, and 25 percent accepted scholarships, loan repayment plans, or similar programs that required medical practice commitments in return, according to a new study.

Since the high costs of medical training prompt these commitments to practice, usually in rural or disadvantaged areas, they promote care for rural and poor patients. However, these positive outcomes of the skyrocketing costs of medical education must be balanced against the negative consequences of discouraging some poor and minority students from pursuing medical careers, cautions Donald Pathman, M.D., M.P.H., of the University of North Carolina at Chapel Hill.

In the study supported by the Agency for Healthcare Research and Quality (HS09165), Dr. Pathman and his colleagues analyzed data from a 1999 mail survey of a national sample of 468 practicing family physicians, general internists, and pediatricians who graduated from U.S. medical schools in 1988 and 1992. The median debt after finishing medical school for doctors with educational loans was $60,000 in 1995 dollars. Nearly three–quarters (70 percent) of the doctors surveyed felt moderate to great financial concerns during medical school, 63 percent during residency, and 55 percent in the years following residency. Physicians who were serving practice commitments were nearly five times as likely to have such concerns as those who were not.

Physicians serving commitments in exchange for training cost support, compared with those without such obligations, were more likely to work in rural areas (33 percent vs. 7 percent) and provide care to more Medicaid-insured and uninsured patients (53 percent vs. 29 percent), but the two groups did not differ in their incomes ($99,600 vs. $93,800). For pediatricians and family physicians, but not internists, higher debt was associated with a greater reported percentage of Medicaid and uninsured patients, ranging from 23 percent for physicians without debt to 37 percent for those with debts over $90,000.

For more details, see "Medical training debt and service commitments: The rural consequences," by Dr. Pathman, Thomas R. Konrad, Ph.D., Tonya S. King, Ph.D., and others, in the summer 2000 *Journal of Rural Health* 16(3), pp. 264-272. ■

Note: Only items marked with a single (*) or double (**) asterisk are available from AHRQ. Items marked with a single asterisk (*) are available from AHRQ's clearinghouse. Items with a double asterisk (**) are also available through AHRQ 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.

Decentralization of California's mental health system enhanced access to care for the most severely ill patients

Implementation of the State-Local Program Realignment Act in California in 1991—which decentralized the State's mental health system—enhanced access to inpatient and outpatient care for patients with the most severe mental illness. The impact of decentralization on patients with less severe diagnoses was mixed, according to a study supported in part by the Agency for Healthcare Research and Quality (AHRQ National Research Service Award training grant T32 HS00026). With funds allocated directly to local governments to provide mental health services, both inpatient and outpatient service use increased significantly for patients with severe diagnoses and fell significantly for those with mild diagnoses.

Patients with schizophrenia, mood disorders, other psychotic disorders, substance use disorders, and personality disorders received significantly more outpatient treatment. During the realignment, nearly 1 percent of patients with severe mental illness were shifted from State hospitals to community-based services, which may explain their increased use of outpatient services. Also, fewer patients with substance use disorders were hospitalized, and more patients with anxiety disorders were treated as outpatients. It has long been argued that substance abuse and anxiety disorders can be treated efficiently on an outpatient basis.

Overall, the level of use of inpatient care after realignment was not cut as severely as one might expect. Patients with schizophrenia or other psychotic disorders received significantly more inpatient treatment. Outpatient services increased for patients with severe diagnoses and met the level of need for patients with most mild diagnoses. After realignment, the treatment cost per inpatient was significantly higher, suggesting that the sickest patients continued to receive expensive services when necessary. However, outpatient costs per user were significantly lower for all diagnoses, probably as a result of service contracting prompted by the realignment program, notes lead author, Amy Zhang, Ph.D., of Case Western Reserve University. Dr. Zhang and her colleagues based their findings on analysis of California's Client Data System of those receiving mental health services in the State from 1988 to 1990 and 1992 to 1994.

See "The effects of program realignment on severely mentally ill persons in California's community-based mental health system," by Dr. Zhang, Richard Scheffler, Ph.D., and Lonnie Snowden, Ph.D., in the September 2000 *Psychiatric Services* 51(9), pp. 1103-1106. ■

Health Care Costs and Financing

Effects of Medicare fee reductions vary by specialty and procedure

In an effort to control Medicare spending, Congress passed a law in 1989 that substantially reduced the amounts the Medicare program reimbursed physicians using a Medicare Fee Schedule (MFS). A recent study examined physicians' responses to these fee changes and in particular whether the reduced fees prompted physicians to provide fewer services. The researchers found that the effects vary, depending on the particular procedure, how much of a doctor's income that procedure constitutes, the doctor's specialty, and other factors beyond fee reduction. The study was conducted by researchers at Georgetown University and supported by the Agency for Healthcare Research and Quality (HS08689).

The researchers used a physician-level database covering the period 1991 through 1994, the Medicare Physician Provider File, and other data sources to analyze the effects of MFS reduction on the number of cataract procedures performed by ophthalmologists and hip and/or knee repairs or replacements performed by orthopedic surgeons. The years 1991 to 1992 saw the greatest decline in fees for all four procedures, but the volume of all four procedures increased between 10 and 18 percent, presumably so doctors could maintain their target incomes.

This volume response was also evident between 1992 and 1993, as cataract operations and hip replacements increased by 1.2 percent and 10.5 percent, respectively. Reduced fees for cataract operations had a potentially strong negative impact on the income of ophthalmologists.

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Effects of Medicare reductions

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However, since ophthalmologists tended to substitute other procedures for cataract operations, the overall impact on their income was small. This substitution effect reduced the amount of cataract operations performed on Medicare patients following the fee reduction.

Surprisingly, the volume of hip repairs and replacements fell by almost 1 percent in response to an increase in fees of 8.7 percent and 4.2 percent, respectively. In contrast, more knee replacements resulted from higher fees between 1993 and 1994. As the fee for hip and knee replacements declined, orthopedic surgeons performed fewer joint surgeries. These findings suggest that the MFS does have the potential to influence physicians' supply decisions, but these effects are complex and may vary by specialty and services, conclude the authors.

More details are in "Physicians' responses to Medicare fee schedule reductions," by Jean M. Mitchell, Ph.D., Jack Hadley, Ph.D., and Darrell J. Gaskin, Ph.D., in *Medical Care* 38(10), pp. 1029-1039, 2000. ■

Rankings of health plans by sicker and healthier patients may differ substantially

Patients who are sicker differ somewhat from healthier patients in their comparative ratings of health plans, as do those who are older or younger. Early results suggest that these differences might sometimes be large enough to consider presenting plan ratings separately by subgroups of patients, according to a study of the Consumer Assessments of Health Plans Survey (CAHPS®) supported by the Agency for Healthcare Research and Quality (HS09205).

CAHPS® was originally developed with support from AHRQ. Subsequently, it has been implemented in many sites where its use has been required by large employers, employer groups, State and Federal Government agencies, and accreditation organizations. Since its launch in 1997, CAHPS has become increasingly important as a tool for evaluating and comparing health plans.

In this study, researchers at Harvard Medical School analyzed responses from 8,204 adults who described their experiences with their health plans in the Washington State demonstration of CAHPS. The survey asked State employees to rate 20 health plans offered by the Washington State Employees Benefits Bureau. The analysis focused on responses to four global rating items on a scale from 0 (worst possible) to 10 (best possible) for the plan, health care received overall, personal doctor, and specialist.

Overall, a case mix model that adjusted for between-plan differences in respondents' perceived health status and age explained from 3 to 7 percent of the variation in individual CAHPS scores. Although the case mix effects were significant, the magnitudes of the adjustments for case mix were typically modest and did not greatly affect the relative ranking of health plans. However, in a few cases the adjustments were large enough to substantially affect a plan's ranking (as large as 44 percent of the standard deviation of plan means for rating of health care). The researchers conclude that despite the limited impact of case mix adjustment, it was nonetheless worthwhile in the interest of fairness to plans with adverse case mix.

Analyses of interactions between plan and patient characteristics (age and health status) suggested that effects of these characteristics might vary from plan to plan, although not enough to reverse the direction of the relationships or to substantially affect the validity of the case mix model. The effects for individual patients, however, could be more substantial, indicating that some plans are more successful than others in equalizing the gap between ratings by sicker and healthier members. The researchers recommend that similar analyses be applied in larger implementations of CAHPS in which these effects could be assessed more precisely.

See "Does the effect of respondent characteristics on consumer assessments vary across health plans?" by Alan M. Zaslavsky, Ph.D., Lawrence Zaborski, M.S., and Paul D. Cleary, Ph.D., in the September 2000 *Medical Care Research and Review* 57(3), pp. 379-394. ■

Most primary care patients with depression prefer counseling over medication

Despite effective psychotherapy and antidepressant medication, about three-fourths of primary care patients with depression do not receive appropriate care. Yet a new study reveals that most (83 percent) of these patients, regardless of the severity of their symptoms, want to be treated for their depression, and most prefer counseling over medication. However, specific treatment preferences vary by race, sex, income, and knowledge about treatments, according to the research. The study was supported in part by the Agency for Healthcare Research and Quality (HS08349).

Kenneth B. Wells, M.D., M.P.H., of the University of California, Los Angeles, and his colleagues based their findings on answers to questionnaires and telephone interviews with nearly 1,200 depressed patients at 46 primary care clinics in 7 geographic regions of the country. The majority who preferred treatment were nearly 4 times as likely to be wealthier (odds ratio, OR 3.7) and almost 3 times as likely to be more knowledgeable about antidepressant medication (OR 2.6) than those who did not want to be treated for their depression. Low-income patients may be less likely to prefer active treatment because of competing priorities for time and money or the belief among the poor that treatments for depression are ineffective, suggest the researchers.

Among those patients who desired treatment, 67 percent preferred counseling over medication as the first line of treatment. Blacks were twice as likely as whites (OR 2.2) and those more knowledgeable about counseling were twice as likely as those who weren’t (OR 2.1) to choose counseling.

Nearly half (47 percent) of patients who wanted counseling for their depression preferred group over individual counseling. Medication and therapy have roughly equal efficacy, especially for those with mild to moderate depressive disorders. However, they differ in terms of time spent and costs, degree of self-disclosure and interaction with others, and use of psychoactive medications. The researchers recommend asking patients about their treatment preferences to better ensure compliance and satisfaction. They also discuss the need to increase access to counseling from primary care.

See “Treatment preferences among depressed primary care patients,” by Megan Dwight-Johnson, M.D., M.P.H., Cathy D. Sherbourne, Ph.D., Diana Liao, M.P.H., and Dr. Wells, in the August 2000 *Journal of General Internal Medicine* 15, pp. 527-534. ■

Correction. An article on juvenile diabetes appears in the October 2000 issue of *Research Activities* (pp. 5-6), in which the journal citation is incorrect. It should be “The predicaments of ‘dangerous safety’: Living with juvenile diabetes in 20th century America,” by Chris Feudtner in the July 2000 *Western Journal of Medicine* 173, pp. 64-67. We apologize for any inconvenience this error may have caused. ■

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Medical practices can benefit from specific policies for interacting with pharmaceutical representatives

Drug companies spend more than $13,000 per physician each year (a total of $10 billion) on drug promotion. Physician approaches for meeting with drug company representatives vary from random encounters to formal policies. They also vary in how they dispense drug samples and control access to them. Most physician practices could do a better job of managing office visits with drug company representatives, instituting specific policies for dispensing samples, and improving accountability for handling samples in the office, concludes a study supported by the Agency for Healthcare Research and Quality (HS08776).

Benjamin F. Crabtree, Ph.D., of the University of Medicine and Dentistry of New Jersey, and his colleagues used detailed descriptions from direct observations of 53 primary care clinicians and nearly 1,600 patient encounters in 18 Nebraska family practices to examine doctor-drug representative interactions. Use of medication samples varied from doctor to doctor, but on average, samples were given in nearly one of every five patient visits. Drug samples given most often were analgesics, antibiotics, anti-inflammatory drugs, and antihypertensives. Multiple drugs were dispensed in 15 percent of encounters, and in only 5 percent of cases was medication dispensed in response to a patient's specific request. Drug samples were even offered for other family members in nearly 4 percent of encounters, especially in rural practices.

Doctors used the samples to test for efficacy and tolerance, provide temporary relief or convenience to the patient, or to save medication costs for poorer patients. Doctors gave patients instructions about drug use (usually dosing) in 48 percent of cases, with little additional information, such as whether the medication should be taken with meals or potential drug interactions. Some office personnel used the samples, and in one office, concern was expressed about patients having unsupervised access to drug samples. Formal strategies and policies regarding drug representative interactions and the use of samples were in place in only 8 of the 18 practices studied (44 percent), usually specifying a given time, such as lunch hour, to meet with the representatives. Gifts to the doctors from representatives varied from pens and candy to meals and theater tickets.

See "The value of pharmaceutical representative visits and medication samples in community-based family practices," by Elisabeth L. Backer, M.D., Jason A. Lebsack, Reinier J.N. Van Tonder, M.D., and Dr. Crabtree, in the September 2000 *Journal of Family Practice* 49(9), pp. 811-816. ■

Medical Effectiveness/Outcomes Research

Transurethral resection of the prostate for benign prostatic hyperplasia declined dramatically but remains safe

Use of transurethral resection of the prostate (TURP) for benign prostatic hyperplasia (BPH, enlarged prostate) peaked during the 1980s but declined between 1991 and 1997 by 50 percent among white men and 40 percent among black men suffering from BPH. Although the use of TURP has declined overall, proportionately more men who now undergo resections are 80 years of age and older (28 percent in 1997 vs. 21 percent in 1984). Outcomes from the surgery continue to be good, with low risk of reoperation or death within 30 days, according to a study by the Patient Outcomes Research Team for Prostate Diseases, which is supported by the Agency for Healthcare Research and Quality (HS08397).

Use of TURP began to decline in the United States in 1987, most likely because of increasing availability of less invasive medical and surgical treatments, changes in reimbursement, and greater involvement of patients in the decisionmaking process, notes PORT leader, Michael J. Barry, M.D., of Massachusetts General Hospital. The researchers used hospital claims data for TURP from a 20 percent national sample of Medicare beneficiaries to examine the trends and outcomes of TURP for BPH since 1984. Compared with 1984 to 1990, age-adjusted rates of TURP for BPH during 1991 to 1997 declined by about 50

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Decline in TURP surgeries

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percent for white men (14.6 to 6.72 per 1,000) and 40 percent for black men (11.8 to 6.58 per 1,000).

The 30-day mortality rate following TURP for BPH was about 0.4 percent for men 65 to 69 years old for both study periods. However, 30-day mortality in men 70 years of age or older undergoing TURP in the 1990s was significantly lower than during the period 1984 to 1990. Since 1987, the 5-year risk for reoperation following TURP for BPH has remained at 5 percent. For TURPs performed in 1997, there was no significant association between a urologist's surgical volume (the annual number of TURPS performed) and a patient's risk of reoperation or 30-day mortality.

More details are in "Transurethral resection of the prostate among Medicare beneficiaries: 1984 to 1997," by John H. Wasson, M.D., Tom Bubolz, Ph.D., Grace Lu-Yao, Ph.D., and others, in the October 2000 *Journal of Urology* 164, pp. 1212-1215. ■

Women's Health

Pregnant women are as likely to deny tobacco use as they are to deny illegal drug use

Use of tobacco, alcohol, and illegal drugs during pregnancy has the potential to harm unborn children and greatly increase medical expenses for the children. For example, the costs associated with caring for neonatal problems resulting from smoking are estimated to be between $1.4 and $2 billion a year, and neonatal care costs for cocaine-positive infants are 10-fold higher than for infants who are free of cocaine at birth.

Before public education campaigns broadcast the harm of smoking during pregnancy, women generally admitted cigarette use to researchers if they were smokers. Now pregnant women appear to be just as likely to under-report cigarette use as they are to under-report use of marijuana or cocaine, according to a study that was supported in part by the Agency for Healthcare Research and Quality (HS08358).

Nina Markovic, Ph.D., of the University of Pittsburgh, and her colleagues compared self-reported use of tobacco, marijuana, and cocaine by 789 predominantly inner-city, pregnant women with urine tests for these substances (and hair analysis for cocaine). Overall, one-fourth of the women reported current cigarette smoking, about 10 percent reported smoking marijuana during the past month, and 3.4 percent reported recent cocaine use. However, urinalysis indicated that 27 percent of women were exposed to tobacco, 23 percent were exposed to marijuana, and 8 percent were exposed to cocaine. Hair analysis–which is a better indicator of past cocaine use–indicated that 24 percent of the women had been exposed to cocaine.

Among those reporting only past use of tobacco, marijuana, and cocaine, 25 percent, 24 percent, and 23 percent, respectively, had positive results of urinary assays. Among those reporting current use, 77 percent, 87 percent, and 76 percent had positive findings; among women reporting no history of use, 6 percent, 6 percent, and 4 percent of results were positive. Women were more likely to underreport current than past use of these substances.

For more information, see "Substance use measures among women in early pregnancy," by Dr. Markovic, Roberta B. Ness, M.D., M.P.H., Denise Cefilli, and others, in the September 2000 *American Journal of Obstetrics & Gynecology* 183, pp. 627-632. ■

Second-trimester chlamydia infection is associated with an increased risk of subsequent preterm birth

Chlamydia trachomatis is the most common sexually transmitted bacterial pathogen in the United States and is estimated to infect from 2 to 37 percent of pregnant women. Unfortunately, women with chlamydia infection during the second trimester of pregnancy are two to three times as likely as uninfected women to have a preterm birth, according to a recent study by the Patient Outcomes Research Team on Low Birthweight in Minority and High-Risk Women. The PORT was led by Robert L. Goldenberg, M.D., of

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Chlamydia infection and preterm birth

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the University of Alabama at Birmingham and supported by the Agency for Healthcare Research and Quality (PORT Contract 290-92-0055).

The researchers compared results of a sensitive DNA test for chlamydia on stored urine specimens collected at 24, 26, 28, and 30 weeks' gestation for women who had a preterm birth at less than 37 weeks' gestation with specimens from women who delivered at term. Chlamydia infection (11 percent overall) was nearly three times more common at 24 weeks' gestation (16 vs. 6 percent) but not at 28 weeks (13 vs. 11 percent) among women who gave birth prematurely compared with women who delivered at term. After adjustment for other risk factors for preterm birth, women with chlamydia infection at 24 weeks' gestation were twice as likely as uninfected women to have a preterm birth at less than 37 weeks' gestation and three times as likely to have a preterm birth at less than 35 weeks' gestation.

Chlamydia infection was significantly more common among women with certain risk factors for preterm birth, such as bacterial vaginosis (57 vs. 33 percent) and a short cervical length (33 vs. 18 percent), but it is not clear whether preterm birth is mediated through these factors. Also, whether universal screening with a DNA test and subsequent treatment for chlamydia infection, as used in this study, would significantly reduce spontaneous preterm delivery remains an unanswered question. The frequency of preterm birth in the United States has increased during recent years despite the recommendation of the Centers for Disease Control and Prevention for chlamydia infection screening among pregnant women.

See "The preterm prediction study: Association of second-trimester genitourinary chlamydia infection with subsequent spontaneous preterm birth," by William W. Andrews, Ph.D., M.D., Dr. Goldenberg, Brian Mercer, M.D., and others, in the September 2000 *American Journal of Obstetrics & Gynecology* 183, pp. 662-668. ■

Mothers of low-birthweight babies perceive poorer infant health and greater caregiver burden than mothers of normal weight babies

Mothers of low birthweight (LBW) infants return home with their fragile infants already stressed by the birth and their infant's hospitalization and treatment. Once at home, they typically must deal with the need for ongoing monitoring and/or treatment of their babies at home. It is not surprising, then, that mothers of LBW infants perceive poorer infant health and more caregiving burden compared with mothers of normal birthweight (NBW) infants, conclude Kathleen M. May, D.N.Sc., R.N., and Jie Hu, M.S., R.N., of the University of Hawaii.

In a study supported by the Agency for Healthcare Research and Quality (National Research Service Award fellowship F32 HS00045), the researchers analyzed questionnaire responses to compare perceptions of infant health, caregiving at home, and help- seeking by 30 mothers of LBW infants and 30 mothers of NBW infants. Mothers who perceived better infant health had more confidence in their ability to care for their babies and perceived this caregiving as less of a burden. Mothers who believed they were more prepared to care for their LBW infants at home also were more confident and, in turn, didn't feel as burdened.

Negative perceptions of infant health, lack of preparation and confidence, and caregiver burden at times overwhelmed the mothers of LBW infants. When this happened, they typically called friends or relatives for support. For more serious matters, they often called neonatal intensive care unit (NICU) nurses, even after their infants were home.

These findings underscore the need for communication and support by NICU nurses toward strengthening mothers' confidence in caring for LBW infants at home. Also, nurses can provide the mothers with information on resources for the long term and help the mothers recognize and appreciate small increments of positive change in their infants. A sense that some of the difficulties the mothers face will diminish with time fosters hope.

For more details, see "Caregiving and help seeking by mothers of low birthweight infants and mothers of normal birthweight infants," by Dr. May and Ms. Hu, in the July 2000 *Public Health Nursing* 17(4), pp. 273-279. ■

Long-Term Care

New checklist enables nursing assistants to effectively monitor the health of nursing home residents

Nursing home residents often suffer from acute illnesses and their complications, which can reduce their quality of life and sometimes lead to death. They would fare better if these illnesses were detected and treated early. Early detection is difficult, however, because nursing home residents may not be able to report physical complaints due to cognitive and communication impairments. Also, many preexisting physical, mental, and behavioral findings, which are unique to each resident, can impede recognition of a change in their condition.

A new illness warning checklist allows nursing assistants, who work closely with residents each day, to assess changes in the residents' functional and behavioral status that may signal the onset of acute illness. The checklist demonstrated fair sensitivity and high specificity for acute illness among nursing home residents in a study supported in part by the Agency for Healthcare Research and Quality (National Research Service Award training grant T32 HS00066). Close monitoring of patients who have changes in behavioral or functional status that signal potential acute illness might avert problems and deaths from acute illness by allowing earlier treatment, notes Kenneth Boockvar, M.D., M.S., of Mount Sinai School of Medicine.

Dr. Boockvar and his colleagues developed the validated, standardized checklist for communication with medical staff. They determined which functional and behavioral status items to include in the 12-item instrument by use of focus group interviews with nursing home staff.

Twenty-three nursing assistants completed the checklist during observation of 74 nursing home residents over 4 weeks. Acute illness was identified by nurse report and chart review. Residents with an instrument-recorded change were more likely to develop an acute illness within 7 days than those with no change. A final 5-item instrument had a sensitivity of 53 percent and a specificity of 93 percent for acute illness. Nursing assistants' documentation of signs of illness preceded chart documentation by an average of 5 days.

See "Nursing assistants detect behavior changes in nursing home residents that precede acute illness: Development and validation of an illness warning instrument," by Dr. Boockvar, H. Daniel Brodie, M.D., and Mark Lachs, M.D., M.P.H., in the September 2000 *Journal of the American Geriatric Society* 48, pp. 1086-1091. ■

Health Care Quality

Recommendations from family and friends carry the most weight in choosing a physician, hospital, or health plan

A new survey of Americans by the Kaiser Family Foundation and the Agency for Health Care Research and Quality shows that recent attention to medical errors may have entered the public's consciousness, since this factor is now among the public's leading measures of health care quality. The results of the national survey of over 2,000 adults indicate that people are more concerned about mistakes happening when they are in the hands of the health care system than when they are flying on an airplane. About 70 percent of those surveyed say that information about medical errors and malpractice suits would be the most helpful in determining the quality of providers.

The survey also found that the public is more likely to rely on recommendations of friends, family, and health professionals they know than on standardized quality indicators. However, the gap between relying on family, friends, and personal physicians versus data has begun to narrow since 1996 when the survey was first conducted. The survey also shows that, although most Americans get their health coverage through the workplace, 6 in 10 do not believe employers are a trusted source of information on quality of providers, and few have

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Choosing a physician, hospital, or health plan

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consulted the Internet for such information.

Americans are more likely now than in 1996 to say there are big differences in the quality of local health plans, hospitals, and specialists. For example, more than half of Americans (55 percent) say there are big differences in the quality of care among local health plans, an increase from 47 percent in 1996.

Provider experience is also important to Americans in informing them about the quality of a doctor or hospital. Sixty-six percent say how much experience a hospital has in performing a particular test or procedure is an important measure of quality; 65 percent say an important measure is the number of times a doctor has conducted a specific medical procedure. Patient experiences in getting care are also important to consumers. Whether the plan has programs to help people with chronic illnesses (67 percent), how easy it is for plan members to see specialists (66 percent), how quickly patients can see a doctor when they need an appointment (64 percent), and the percentage of plan members who get preventive care for conditions like high blood pressure (63 percent) were frequently cited as indicators of health plan quality.

Around 6 in 10 Americans say they would rely “a lot” on friends and family members or their regular doctors to make choices. Less than half say they would rely on indicators such as patient surveys, consumer groups, and newspapers and magazines. The majority say that if they wanted to find information comparing the quality of different providers, they would be very likely to ask for recommendations from friends, family members, or co-workers (70 percent) or from a doctor, nurse, or other health professional they know (65 percent).

Personal recommendations and familiarity are so important that they often outweigh more formal indications of quality. More people say that they would choose a surgeon they had seen before but who was not well rated (50 percent) than a surgeon they had not seen before who was rated higher (38 percent). Likewise, people are more likely to choose a hospital that is familiar (62 percent) over one that is rated higher (32 percent).

Only about 1 in 10 Americans have used information that compares quality among health plans, hospitals, or doctors to help them make their health care decisions. This is not surprising given that few people have seen any information of this kind. About one-quarter have seen comparative information about health plans, only 15 percent about hospitals, and 10 percent about doctors. Among those who have seen information comparing the quality of providers, many indicated that they did not need to make a decision at the time they saw the information on quality or that the information was not relevant to their personal health concern.

Despite the increased role of the Internet in information gathering of all kinds, the survey shows that few people are currently going online to find information about the quality of providers, and few trust health Web sites to provide accurate information. Currently, just 7 percent of the public has seen information about quality online, which is equivalent to 27 percent of those who had actually seen any comparative quality information at all. However, when asked where they would be likely to turn in the future for such information, 28 percent say they would go online. While more than 7 in 10 say they trust doctors and pharmacists to provide accurate information about prescription drugs, only 9 percent say they have “a lot” and 31 percent say “some” trust in health Web sites for such information.

Seventy-three percent say that the government should require health care providers to report all serious medical errors and to make sure this information is publicly available versus 21 percent who say that this type of reporting should be voluntary in order to ensure the privacy of patients and medical staff. Furthermore, more than 6 in 10 believe there is a role for government in promoting, monitoring, and providing information about the quality of doctors, hospitals, and health plans. Twenty-eight percent say that the government should just work with providers to improve quality, 21 percent say that the government should go further and penalize providers who fail to meet standards, and 12 percent think that the government should just make sure information is available.

The results of the Kaiser Family Foundation/Agency for Healthcare Research and Quality’s National Survey on Americans as Health Care Consumers: An Update on the Role of Quality Information are based on a telephone survey conducted between July 31 and October 9, 2000, among a randomly selected nationally representative sample of 2,014 adults 18 years of age or older. Representatives from both organizations worked together to develop the survey questionnaire and to analyze the results. Fieldwork was conducted by Princeton Survey Research Associates for the Kaiser Family Foundation. The margin of sampling error is +/-2 percentage points. For results based on subsets of respondents, the margin of error is higher. Note that in addition to sampling error there are other possible sources of measurement error. ■

AHRQ's Building Bridges Conferences show that health services research can drive improvements in quality of care

Quality of care problems are found in all regions of the United States, in small and large communities, and in fee-for-service and managed care systems alike. A key goal of the 1999 and 2000 Building Bridges Conferences, sponsored by the Agency for Healthcare Research and Quality, was to bridge the gap between scientific evidence about methods for improving quality of care with health care practice and policy.

Both conferences convened health services researchers, health plan representatives, clinicians, and Federal and State policymakers to focus on use of health services research to drive quality improvement. The December 2000 supplement to *Medical Care Research and Review* (volume 57, number 2) presents articles drawn from presentations at the two conferences.

Several articles address health care organization, delivery, and payment issues related to quality of care. They provide a snapshot of select activities being implemented by health plans, clinicians, and employers. Other articles develop and refine an agenda for future research. Four articles contributed by AHRQ staff and AHRQ-supported researchers are summarized here.

Brach, C., Sanches, L., Young, D., and others, "Wrestling with typology: Penetrating the "black box" of managed care by focusing on health care system characteristics," pp. 93-115.

Recognizing the problems associated with continued use of out-of-date typologies, these authors present a new approach to describing the health care system—a matrix of organizational and delivery characteristics. The matrix includes a description for each key role in the health care system (i.e., sponsor, plan, provider intermediary organization, and direct services provider) of financial and structural features, as well as care delivery and management policies and product lines. It suggests a new set of players to be studied, emphasizes the relationships among players, and provides a checklist of variables to be included in research analyses. Reprints (AHRQ Publication No. 01-R014) are available from AHRQ.*

Fraser, I., and McNamara, P., "Employers: Quality takers or quality makers?" pp. 33-52.

This review of research on employers' purchasing practices finds there is little evidence that employers are using their market leverage to assure or improve quality. And when they do, the quality indicators most frequently used probably are not the ones that clinical experts would select as most reflective of clinical quality. The authors conclude that employers as a group may be becoming more informed quality takers but not quality makers. Reprints (AHRQ Publication No. 01-R012) are available from AHRQ.*

Hermann, R.C., Leff, H.S., Palmer, R.H., and others, "Quality measures for mental health care: Results from a national inventory," pp. 136-154 (AHRQ grant HS10303).

Quality of care measures are particularly underdeveloped in the area of mental health. This paper analyzes 86 process measures that have been developed to assess the quality of mental health care. Most measures evaluate treatment of major mental disorders, for example, schizophrenia and major depression, with a few focusing on children or the elderly. Domains of quality include treatment appropriateness, care continuity, access, coordination of care, disease detection, and disease prevention.

Scanlon, D.P., Rolph, E., Darby, C., and Doty, H.E., "Are managed care plans organizing for quality?" pp. 9-32 (AHRQ grant HS09204).

Interviews with leaders of 24 health plans revealed that MCOs are responding to outside pressures, particularly from Medicare and Medicaid, to engage in processes that improve the quality of care they provide. MCO governing boards are assuming an oversight role for quality improvement, dedicated senior staff have explicit responsibility for quality improvement, and practicing physicians are helping set medical policy. MCOs are also slowly building their technical capacity to collect and use information for quality improvement. Reprints (AHRQ Publication No. 01-R013) are available from AHRQ.*

Limited copies of the special supplement of *Medical Care Research and Review* featuring selected presentations from the 1999 and 2000 Building Bridges

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Building Bridges conferences

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meetings are now available. The supplement, "Contributions from the Field: Informing Quality Improvement," includes articles that provide insights on organizational and institutional approaches to quality. The articles also inform AHRQ's future research agenda related to quality by identifying evidence gaps, offering design suggestions, and implicitly identifying research priorities. In addition to the articles authored by AHRQ staff or funded by the agency, the supplement includes the following articles:

Translating Behavioral Health Services Research into Benefits Policy, by Kyle L. Grazier and Harold Pollack

Are Women Being Counseled about Estrogen Replacement Therapy? by Teresa C. Gallagher, Olga Geling, Jennifer FitzGibbons, John Aforismo, and Florence Comite

Assessing the Relationship between Quality of Care and the Characteristics of Health Care Organizations, by R. Adams Dudley, Bruce E. Landon, Haya R. Rubin, Nancy L. Keating, Carol A. Medlin, and Harold S. Luft

The annual Building Bridges meeting began in 1995 as a collaborative effort between the American Association of Health Plans and the Agency for Healthcare Research and Quality, with the Centers for Disease Control and Prevention joining the partnership in 1998 and the Blue Cross Blue Shield Association joining in 1999. The purpose of the meetings is to bring together managed care researchers both outside and within managed care organizations to examine critical issues related to quality, access, and costs of managed care.

Copies of the new supplement *(Medical Care Research and Review*, volume 57, supplement 2, 2000) are available from AHRQ; ask for AHRQ Publication No. OM 01-0003.* See the back cover of *Research Activities* for ordering instructions.

Mark your calendars now for the 2001 meeting, "Building Bridges VII: Assessing Policy Decisions and their Impact on Health Care Delivery," which will be held April 26-27, 2001, in Seattle, WA. For more information about the 2001 meeting, visit AAHP's Web site at http://www.aahp.org. Two AHRQ initiatives, the Healthcare Cost and Utilization Project (HCUP) database and the Consumer Assessment of Health Plans Survey (CAHPS®), will be featured in a meeting workshop. ■

Researchers are developing and testing an instrument to examine quality of care for Chinese and Vietnamese Americans

Over the past three decades, immigration to the United States of Asian Americans has risen by more than 400 percent. In fact, Asian Americans are one of the fastest growing minority groups in the country. Cultural beliefs, as well as linguistic and other barriers, make providing quality care for Asian Americans a unique challenge.

A study supported by the Agency for Healthcare Research and Quality (HS01316) is now underway to develop a culturally sensitive questionnaire for use in evaluating the quality of health care provided to Asian Americans of Chinese and Vietnamese descent. These patients include many new immigrants who have a low income and limited English proficiency.

Deeply held cultural beliefs can present barriers to quality health care, especially if providers lack sensitivity to these concerns. Also, the health beliefs of Asian Americans are unfamiliar to many American clinicians. For example, many Asian Americans believe that health reflects the balance of yin and yang, hot and cold elements, within the body. When experiencing an upper respiratory infection, they may follow the traditional custom of rubbing the body with oil and a coin to release the "cold" element, which may result in bruises along the spine and sternum. Western health care providers often mistake these bruises for indications of abuse or signs of hematologic diseases. To care for these patients effectively, providers must be able to communicate with them about such practices.

Finding out how these patients perceive the quality of care they receive is a first step in understanding their needs. Thus, the researchers are using patient reports and ratings of their experiences to develop a questionnaire that can accurately measure quality of care from the patient's perspective. They will use patient focus groups to identify specific questionnaire items that

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Quality of care for Asian Americans

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emphasize communication and access to care. The survey will be conducted in the patients' native language. The researchers will validate the questionnaire, pilot test it among Chinese and Vietnamese American patients at four provider sites, assess its validity for use in diverse regions, and then evaluate it in a national sample.

See "Patient-centered quality measures for Asian Americans: Research in progress," by Quyen Ngo-Metzger, M.D., M.P.H., Michael P. Massagli, Ph.D., Brian Clarridge, Ph.D., and others, in the July 2000 *American Journal of Medical Quality* 15(4), pp. 167-173. ■

Agency News and Notes

AHRQ releases three new evidence reports

Three new evidence report summaries were released recently by the Agency for Healthcare Research and Quality. They represent the results of systematic reviews of the evidence on interventions to modify dietary behavior related to cancer risk, technologies for identifying acute cardiac ischemia in the ER, and management of preterm labor. The reports were prepared by Evidence-based Practice Centers (EPCs) supported by the Agency for Healthcare Research and Quality. They provide organizations with comprehensive, science-based information on common, costly medical conditions and new health care technologies.

There are 12 AHRQ-supported EPCs; they systematically review the relevant scientific literature on topics assigned to them by AHRQ and conduct additional analyses when appropriate prior to developing their reports and assessments. The goal is to inform health plans, providers, purchasers, and the health care system as a whole by providing essential information to improve health care quality. Evidence report summaries are now available from AHRQ, both online and in print. Copies are available from the AHRQ Clearinghouse. Copies of the full evidence reports will be available in the near future.

Efficacy of Interventions to Modify Dietary Behavior Related to Cancer Risk. A number of studies are being conducted to examine the role of dietary change in cancer risk reduction. The Research Triangle Institute–University of North Carolina at Chapel Hill EPC undertook a systematic review of the literature to clarify the available evidence on the efficacy and effectiveness of behavioral interventions in promoting dietary change. They compared interventions to assess effectiveness in helping individuals or population groups modify their diets to consume more fruits and vegetables and less fats. They also looked for evidence on the efficacy of dietary interventions by population subgroup, particularly those defined by ethnicity and sex. And finally, they looked for evidence of cost-effectiveness. The EPC identified considerable evidence on the efficacy and/or effectiveness of different types of interventions in helping individuals modify their dietary behavior. Few studies could be analyzed for efficacy according to population subgroup, and no studies met the EPC's review criteria on cost-effectiveness.

Copies of the report summary (AHRQ Publication No. 01-E028) are available from AHRQ.** Copies of the full report (AHRQ Publication No. 01-E029) will be available in spring 2001.*

Evaluation of Technologies for Identifying Acute Cardiac Ischemia in Emergency Departments. The Evidence-based Practice Center at New England Medical Center (contract 290-97-0019) conducted a systematic review of recently published (1994 forward) scientific evidence on technologies for early diagnosis of acute cardiac ischemia (ACI) in the emergency department. The EPC used their review to update an earlier report on the topic prepared by a working group convened by the National Heart Attack Alert Program (NHAAP). NHAAP is made up of representatives from the National Heart, Lung, and Blood Institute and 40 professional

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New evidence reports

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organizations. The EPC review identified studies on a diverse array of technologies with varying degrees of diagnostic accuracy and cost-effectiveness that are available for use in general or selected populations to diagnose ACI in the ER. Findings include:

- Prehospital 12-lead ECG has moderate sensitivity and specificity for diagnosis of ACI.
- Only ACI-TIPI has been shown to reduce unnecessary hospitalizations without decreasing appropriate admissions for patients with ACI.
- The Goldman chest pain protocol has good sensitivity for acute myocardial infarction, but there is no evidence to show differences in hospitalization rate, length of stay, or estimated costs.
- Single measurement of biomarkers at ER presentation has poor sensitivity for AMI. Serial measurements can greatly increase sensitivity while maintaining specificity. Biomarkers cannot identify most patients with unstable angina.
- Diagnostic technologies such as echocardiography, sestamibi perfusion imaging, and stress ECG may have very good to excellent sensitivity in selected populations, but they have not been sufficiently studied.

Copies of the report summary (AHRQ Publication No. 00-E031) are available from AHRQ.** Copies of the full report (AHRQ Publication No. 01-E006) will be available from AHRQ in early 2001.*

Management of Preterm Labor. The Research Triangle Institute-University of North Carolina EPC (under contract 290-97-0011) reviewed the available evidence on detection and management of preterm labor. In preparing their evidence report, the EPC addressed four main issues:

- Appropriate criteria for diagnosing preterm labor, specifically with respect to the use of three biologic markers and their positive and negative predictive value.
- Efficacy and effectiveness of tocolytics to arrest uterine contractions.
- Efficacy and effectiveness of antibiotics to treat undiagnosed infections that might trigger preterm labor.
- Efficacy of home monitoring of uterine activity.

Copies of the report summary (AHRQ Publication No. 01-E020) are available from AHRQ.** The full report (AHRQ Publication No. 01-E021) is expected in early 2001.* ■

AHRQ issues the stroke PORT phase-one final report with new CD-ROM

The Agency for Healthcare Research and Quality has issued the phase one final report of the patient outcomes research team (PORT) on stroke. The final report pulls together the literature review and all of the findings developed since the study was funded in 1991.

The report includes a CD-ROM that provides complete documentation specifications for the Stroke Policy Model, a simulation model for studying the costs and outcomes of the natural history of stroke, as well as the costs and outcomes associated with various preventive or therapeutic interventions. The documentation–which includes programming codes, algorithms, and all input data used in the model—is designed to help facilitate and encourage the use of this model in other related studies of stroke interventions by other researchers. This model can help determine the return on investment from quality improvement programs focused on stroke prevention and treatment.

The goal of the Stroke PORT, headed by David Matchar, M.D., of Duke University, was to improve health outcomes for people at high-risk for stroke by identifying appropriate and cost-effective strategies for secondary and tertiary stroke prevention. The study identified two stroke prevention interventions with significant potential to improve public health: carotid endarterectomy and anticoagulation with warfarin.

During their evaluation, the researchers found that, although effective in preventing strokes related to atrial fibrillation, warfarin is underprescribed, mostly because its effects can be difficult to monitor. In addition, a substantial proportion of eligible patients who are taking warfarin are not receiving effective doses, placing them at risk of stroke

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Stroke PORT final report

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(doses too low) or bleeding (doses too high). To determine the best way to monitor the use of warfarin, in 1996 the PORT began a second phase, the Managing Anticoagulation Services Trial, or MAST, which is cosponsored by the DuPont Pharmaceuticals Company through a public-private partnership. The MAST is an intervention project organized around a randomized trial comparing coordinated anticoagulation services with usual practice. This second phase of the study is expected to be completed by the end of 2000.

The report and CD-ROM are available as a packaged set (AHRQ Publication No. 00-N001) from AHRQ.* See the back cover of *Research Activities* for ordering information. ■

Announcements

AHRQ names Senior Scholar-in-Residence on Domestic Violence

The Agency for Healthcare Research and Quality and the Family Violence Prevention Fund (FVPF) recently announced the selection of Jeffery H. Coben, M.D., as AHRQ's Domestic Violence Senior Scholar-in-Residence. Dr. Coben will work with AHRQ's Center for Outcomes and Effectiveness Research on several projects that will provide scientific information on the cost, quality, outcomes, and effectiveness of domestic violence screening and interventions available to domestic violence victims in health care settings.

Dr. Coben is an Associate Professor of Emergency Medicine and Surgery at MCP Hahnemann School of Medicine and Director of the Center for Violence and Injury Control at Allegheny-Singer Research Institute, Allegheny General Hospital. He is an established authority in the field of injury and violence and has studied and published in peer-reviewed literature on the identification of domestic violence victims in medical settings and the effectiveness of treatment programs for both batterers and victims.

Dr. Coben received his B.S. from Springfield College in Springfield, MA, and his Doctor of Medicine from the University of Pittsburgh. He completed a combined emergency medicine/internal medicine internship and residency program at Northwestern University Medical Center. His appointment is effective through July 15, 2001.

Editor's note: AHRQ recently awarded funding for four new research projects to improve treatment and outcomes for victims of domestic violence. See page 18 for more information on these projects. ■

Journal article describes AHRQ's children's health research program. Reprints of a recent article by John M. Eisenberg, M.D., Director of the Agency for Healthcare Research and Quality, Lisa A. Simpson, M.B., B.Ch., M.P.H., Deputy Director of AHRQ, and Denise M. Dougherty, Ph.D., AHRQ's Senior Advisor on Child Health, are now available from AHRQ. The article describes the Agency's efforts in children's health, including recent accomplishments and current activities. Reprints of "Children's health care issues: A continuing priority," by Drs. Dougherty, Simpson, and Eisenberg, which appears in the October 2000 *Health Services Research* 35(4), pp. xi-xix, are available from the AHRQ Clearinghouse (AHRQ Publication No. 01-R002).* ■

Recruiting is underway for several senior positions at AHRQ

The Agency for Healthcare Research and Quality is seeking applicants for several senior positions within the Agency. One of the positions is Director of AHRQ's Office of Priority Populations Research; the other position is for a senior research scientist to work on disparities in health care delivery.

Director, Office of Priority Populations Research. The Director will help establish the office and lead a staff of multidisciplinary professionals and support staff in developing and implementing an Agency-wide strategy to conduct extramural and intramural research related to the health needs and health care of priority populations (minorities, women, children, the elderly, low-income groups, the disabled, and others with special health care needs). We are seeking candidates who are highly motivated and have professional training in a clinical discipline (e.g., medicine, nursing) or a related health, allied, social, or behavioral science discipline. Also, experience in planning, evaluation, conduct, or administration of investigations related to clinical medicine, health services research, on one of AHRQ's priority populations is required. We are seeking applicants with national standing in the areas of health services research and/or health policy. The position will be filled by use of the Senior Biomedical Research Service (SBRS) or Senior Service Fellow (SSF) appointment mechanism. Salary will be commensurate with qualifications and experience.

Senior Research Scientist, Disparities in Health Care Delivery. AHRQ's Center for Outcomes and Effectiveness Research is seeking an experienced researcher in the area of racial and ethnic disparities in health care delivery. The successful applicant will be responsible for co-directing the Center's EXCEED–Excellence Centers for Eliminating Disparities–initiative. EXCEED consists of nine centers focused on research to clarify why disparities in health care delivery associated with race and ethnicity occur. The intent is to develop and test interventions to eliminate those disparities. The individual selected for this position also will be expected to conduct complementary independent intramural research. Applicants should possess a doctoral degree in health services research, a related social science (e.g., public health, sociology, political science) discipline, or clinical medicine. Applicants also should have a demonstrated understanding of research, research methods, statistics, and technical writing. Clinicians interested in this position must have postdoctoral research training or equivalent training and experience. Previous academic study or applied research experience in the areas of socioeconomic, racial and ethnic disparities in health care, and their consequences for health care delivery is highly desirable.

The application deadline for these positions is January 23, 2001. To obtain a copy of the full text announcement for either position, as well as application instructions, call 301-594-2408 or visit AHRQ's Web site at **www.ahrq.gov** and click on "Job Announcements." AHRQ is an Equal Opportunity Employer. ■

AHRQ awards new research projects to help victims of domestic violence

The Agency for Healthcare Research and Quality has awarded approximately $5.5 million in total projected funding over the next 5 years for four new research projects to improve treatment and outcomes for victims of domestic violence. These grants are funded under AHRQ's Request for Applications (RFA), "Violence Against Women: Evaluating Health Care Interventions," which was released on February 16, 2000.

Health care organizations have a critical opportunity to identify victims of intimate partner violence and to provide services that enhance health outcomes. Funding research in this area will provide these organizations with evidence-based findings about treatment approaches that are most effective. To that end, the goals of the RFA, released as part of the Secretary of Health and Human Services' FY 2000 initiative on violence against women, are to develop new knowledge in the prevention of domestic violence, improve the identification of female patients at risk, and evaluate

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New domestic violence grants

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outcomes and effectiveness of health care interventions designed to treat domestic violence victims. The newly funded projects are:

Treatment outcomes for abused women in public clinics. Principal investigator Janet Y. Groff, M.D., Ph.D., University of Texas Health Science Center, Houston. Total projected funding $1,973,506. Project period 9/30/00–8/31/04. The researchers will evaluate the effectiveness of nurse case management and group education for black, Hispanic, and white abused women attending two inner city primary care clinics. These two clinics are part of a county-wide clinic and hospital system for low income people. In addition, the researchers will evaluate the impact of the interventions on the health, functional status, and medical use of children of abused women.

A randomized controlled trial of computer screening for domestic violence. Principal investigator Wendy Levinson, M.D., University of Chicago, Chicago, IL. Total projected funding $1,031,581. Project period 9/30/00–8/31/03. The goal of this project is to evaluate the effectiveness of a computerized assessment tool to help clinicians in emergency departments identify potential victims of domestic violence and recommend specific strategies for management. The study will include women who come to the emergency departments of two hospitals, one in the inner city and the other in the suburbs.

The cost and benefits of intervening: Battered women's mental and physical health over time. Principal investigator Laura McCloskey, Ph.D., Harvard School of Public Health, Boston, MA. Total projected funding $1,231,268. Project period 9/30/00–8/31/05. The researchers will compare seven existing domestic violence interventions located in different hospital settings. Findings from this study will offer new information on the effectiveness and cost-effectiveness of different hospital-based interventions. The goal is to identify effective programs and encourage their adoption.

Outcomes for intimate partner violence: Patient and provider perspectives. Principal investigator Michael Rodriguez, M.D., University of California, San Francisco. Total projected funding $1,253,078. Project period 9/30/00–9/29/04. The researchers will study 125 Hispanic women in prenatal clinics in San Francisco who are at risk for intimate partner violence (IPV). A principal goal is to determine women's preferences for health care outcomes from IPV interventions.

Editor's note: See page 17 for an announcement of AHRQ's newly appointed Domestic Violence Senior Scholar-in-Residence. ■

AHRQ awards 15 new research projects on key topics

The Agency for Healthcare Research and Quality has announced the award of approximately $15.4 million in total projected funding over the next 5 years to fund 15 new research projects on key topics. Topics include pain management, children's health, elderly health, diabetes, and smoking cessation intervention. The newly funded projects are:

Point of care delivery of research evidence. Principal investigator E. Andrew Balas, Ph.D., University of Missouri at Columbia. Total projected funding $1,452,905. Project period 9/01/00–8/31/03. The researchers will develop a computerized decision support system for delivering research evidence and promoting behavioral change. They will investigate automated methods for selecting credible and substantial clinical evidence, matching patient data with clinical evidence, and directly delivering high-quality evidence to the point of clinical decisionmaking.

Economic impact of breastfeeding promotion intervention. Principal investigator Karen A. Bonuck, Ph.D., Montefiore Medical Center, Bronx, NY. Total projected funding $334,864. Project period 9/01/00–11/30/03. The researchers will examine the cultural issues that impact breastfeeding behavior among black, Asian, and Hispanic women and conduct a randomized controlled clinical trial at two community health centers. They will test the hypothesis that the economic benefits of promotions for breastfeeding outweigh the costs of providing the interventions.

Hospitalization of nursing facility residents. Principal investigator Joan Buchanan, Ph.D., Harvard Medical School, Boston, MA. Total

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projected funding $1,802,173. Project period 9/30/00–9/29/03. The researchers will analyze variations in hospitalization rates among nursing facilities. The two primary goals of this project are to understand the extent and determinants of variation in hospitalization rates and develop nursing home hospitalization profiles primarily by comparing predicted hospitalization rates to actual rates.

Developing and validating quality measures for children. Principal investigator Mark R. Chassin, M.D., Mount Sinai School of Medicine, New York, NY. Total projected funding $1,580,364. Project period: 9/30/00–8/31/04. The researchers will assess the validity of quality measures on the appropriate use of tympanostomy tubes in children. They also will create evidence-based guidelines to identify children who are appropriate and inappropriate candidates for tympanostomy tube placement.

TennCare gaps for children: Asthma clinical outcomes. Principal investigator William O. Cooper, M.D., Vanderbilt University Medical Center, Nashville, TN. Total projected funding $241,318. Project period 9/01/00–2/28/02. The goal is to evaluate the effect of gaps in enrollment in Tennessee's Medicaid program, TennCare, for children with asthma using two markers for use of asthma care: emergency room visits and hospitalizations.

Health plan responses to Medicare HMO premium payments. Principal investigator Randall P. Ellis, Ph.D., Boston University, Boston, MA. Total projected funding $261,206. Project period 9/01/00–8/31/02. The researchers will examine Medicare policy in 1998 and 1999 that changed payments to Health Maintenance Organizations (HMOs) and assess the effects of such changes on HMO premiums, competition, benefit features, and enrollment.

Patient-centered care and health care costs. Principal investigator Ronald M. Epstein, M.D., University of Rochester, Rochester, NY. Total projected funding $1,401,442. Project period 9/30/00–8/31/03. The researchers will examine the relationship between measures of physicians' patient-centeredness and health care costs, health status, and patient satisfaction.

Observational studies vs. randomized controlled trials. Principal investigator Arthur J. Hartz, M.D., Ph.D., University of Iowa, Iowa City. Total projected funding $376,095. Project period 9/30/00–8/31/02. The researchers will compare the results of recent observational studies with those from randomized controlled trials that have investigated the same treatment and outcome. They will examine whether similar conclusions can be drawn from observational and randomized controlled studies and if differences can be explained.

Rural education as access point for teen smoking intervention. Principal investigator Kimberly A. Horn, E.D.D., West Virginia University Research Corporation, Morgantown. Total projected funding $1,437,199. Project period 9/30/00–8/31/04. The primary goal is to examine the feasibility and efficacy of a theory-based motivational tobacco intervention (MTI) for rural smokers ages 14 to 18 who present in the West Virginia University Hospital Emergency Department (ED) for treatment. Following demonstration of feasibility and efficacy, a secondary goal is to develop a transportable MTI package, including materials and practice recommendations for EDs, to guide future study and dissemination of MTIs.

Effect of Navajo interpreters on diabetes outcomes. Principal investigator Melvina McCabe, M.D., University of New Mexico School of Medicine, Albuquerque. Total projected funding $2,345,456. Project period 9/30/00–9/29/05. The goals are to evaluate the variable impact of language interpretation as a function of the training of Navajo interpreters and the effects they have on diabetes outcomes and the cost of ambulatory care of Navajo diabetic patients.

Efficacy/reliability of telemedicine in routine pediatric practice. Principal investigator Kenneth M. McConnochie, M.D., University of Rochester, Rochester, NY. Total projected funding $295,125. Project period 9/30/00–9/29/01. The primary goal of this project is to assess the reliability and efficacy of telemedicine for common, acute complaints of children presenting to the emergency department or primary care office setting.

Physician intervention to improve diabetes care. Principal investigator Patrick J. O'Connor, M.P.H., HealthPartners Research Foundation, Minneapolis, MN. Total projected funding $1,099,570. Project period 9/30/00–8/31/03. The goal of this randomized controlled trial is to compare two performance improvement interventions. One consists of a private session between a study physician and a reviewing physician ("influential physician").

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New research projects

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The influential physician will provide case-based advice to the study physician on how to tailor treatment methods for their patients. The other intervention involves the use of a computerized automated medical record by a trained research associate to present each study physician with a series of clinical cases that will guide him or her the through the appropriate treatments for their patients.

Computer-based guidelines to prevent sudden cardiac death. Principal investigator Gillian D. Sanders, Ph.D., Stanford University, Stanford, CA. Total projected funding $1,008,120. Project period 9/30/00–8/31/03. The three goals of this project are to: develop models for automated creation of guidelines from evidence-based decision models; create and evaluate a guideline based on the cardiac arrhythmia PORT; and evaluate clinicians' use of and satisfaction with the Web-based ALCHEMIST—a computer-based system used to automatically create annotated guidelines from evidence-based decision models—as compared with traditional guidelines.

Consequences of drug cost sharing in the elderly. Principal investigator Sebastian Schneeweiss, M.D., Brigham and Women's Hospital, Boston, MA. Total projected funding $999,190. Project period 9/30/00–2/28/03. In this observational study, researchers will assess the impact of a Canadian policy to impose differential cost sharing for a class of medications in a health insurance program for the elderly and the needy population.

Resident assessment of pain management. Principal investigator Joan M. Teno, M.D., Brown University, Providence, RI. Total projected funding $728,284. Project period 9/30/00–8/31/02. The researchers will address the undertreatment of pain in nursing homes by developing and validating measurement tools for pain management for purposes of accountability and quality improvement. ■

$3.4 million earmarked for research projects on improving health care quality

The Agency for Healthcare Research and Quality has earmarked more than $3.4 million in total projected funding over the next 3 years for four new research demonstration projects that will enhance the health care system's ability to provide patients with information on health care quality. These projects are an integral part of AHRQ's initiatives designed to give health care decisionmakers evidence-based information to help them make better informed choices about health and health care services.

These grants are funded under AHRQ's Request for Applications (RFA) "Making Quality Count for Consumers and Patients," released January 5, 2000. The goal of the RFA was to seek demonstration projects that could facilitate consumer and patient use of information on quality in health care. One project under this RFA was funded solely by the National Cancer Institute (NCI). The newly funded projects are:

Information about quality in a randomized evaluation. Principal investigator Patrick S. Romano, M.D., University of California, Davis. Total projected funding $1,157,160. Project period 9/30/00–8/31/03. The researchers will identify factors associated with consumers' use of employer-disseminated information about health plan and medical group performance. The goal is to determine if and how consumers use or do not use this information during open enrollment. They will study the use of comparative health plan reports by employees, retirees, and families of the California Public Employees' Retirement System's (CalPERS).

Helping elders include quality in health plan choice. Principal investigator Lauren D. Harris-Kojetin, Ph.D., Research Triangle Institute, Research Triangle Park, NC. Total projected funding $1,090,711. Project period 9/30/00–8/31/03. The researchers will develop and evaluate an integrated information and decision support strategy for use by employee benefits staff in counseling employees aged 60-64 about their Medicare plan options. They will examine how best to develop a system to integrate comparative quality, cost, and benefit information with motivational, educational, and decision support in a way that works for older men and women with limited education.

Quality factors in nursing home choice. Principal investigator Joann G. Congdon, Ph.D., University of Colorado Health Science Center,

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Improving health care quality

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Denver. Total projected funding $732,477. Project period 9/30/00–8/31/03. The researchers will develop and evaluate information strategies to help consumers use quality factors in making nursing home choices. They will interview consumers and health care providers who help consumers make decisions about nursing home care to determine their information needs, uses, and values and develop a prototype report card using public domain information.

Understanding numbers in health: A primer for patients. Principal investigator Steven E. Woloshin, M.D., M.S., Dartmouth College, Hanover, NH. Total projected funding $421,288. Project period 9/29/00–9/28/02. The researchers will develop and evaluate a general education booklet to help people as they think about their risk for cancer and try to balance their risk and the benefits of treatment. They also will develop and evaluate three basic risk communication tools to supplement the general booklet: cancer risk charts, prevention benefit charts, and standard disease summary templates. This project was funded solely by NCI. ■

Research Briefs

Boles, M., Getchell, W.S., Feldman, G., and others. (2000). "Primary prevention studies and the healthy elderly: Evaluating barriers to recruitment." (NRSA training grant T32 HS00069). ***Journal of Community Health*** **25(4), pp. 279-292.**

There are numerous barriers to recruiting elderly men and women who are healthy to participate in primary prevention studies. To better identify and understand the barriers, these investigators conducted and evaluated a comprehensive recruitment strategy to encourage healthy elderly members of a large health maintenance organization to participate in a primary prevention study testing aspirin. They used a computerized medical database screening, statistical sampling, health plan mailings, e-mail communication, and primary care providers in their recruitment efforts. Of the 44 percent who responded to recruitment efforts, only 3 percent were enrolled, an overall yield of slightly less than 2 percent. A followup of focus groups with "eligible refusers" revealed that they were hesitant to give up their choice to use aspirin, unwilling to travel to the research center, and reluctant to risk their tenuous hold on good health to participate in a study of primary prevention. Awareness of these attitudes can help researchers design more effective recruitment strategies to involve healthy elderly people in studies.

Gausche-Hill, M., Lewis, R.J., Gunter, C.S., and others. (2000, October). "Design and implementation of a controlled trial of pediatric endotracheal intubation in the out-of-hospital setting." (AHRQ grant HS09166). ***Annals of Emergency Medicine*** **36(4), pp. 356-365.**

This article describes the design and implementation of the 4-year Pediatric Airway Management Project, the largest prospective, controlled out-of-hospital study of airway management of children ever reported. Currently, use of bag-valve-mask ventilation (BVM) and endotracheal intubation (ETI) are the two airway management techniques available to paramedics to support the breathing of critically ill or injured children. Many emergency medical systems have incorporated pediatric ETI into their paramedic scope of practice, and 97 percent of paramedic primary training programs teach ETI, despite the lack of sufficient data demonstrating improved patient survival or other meaningful outcome with ETI. The Pediatric Airway Management Project was conducted to determine whether paramedics trained in pediatric ETI can improve survival for children having serious breathing problems (e.g., infants with sudden infant death syndrome or children suffering from near drowning, respiratory arrest, seizures, or multiple trauma). **Editor's note**: See page 2 of the February 2000 issue of *Research Activities* for a summary of findings from this study, based on an article in the January 9, 2000, issue of the *Journal of the American Medical Association* 283(6), pp. 783-790, by Dr. Gausche and colleagues. ■

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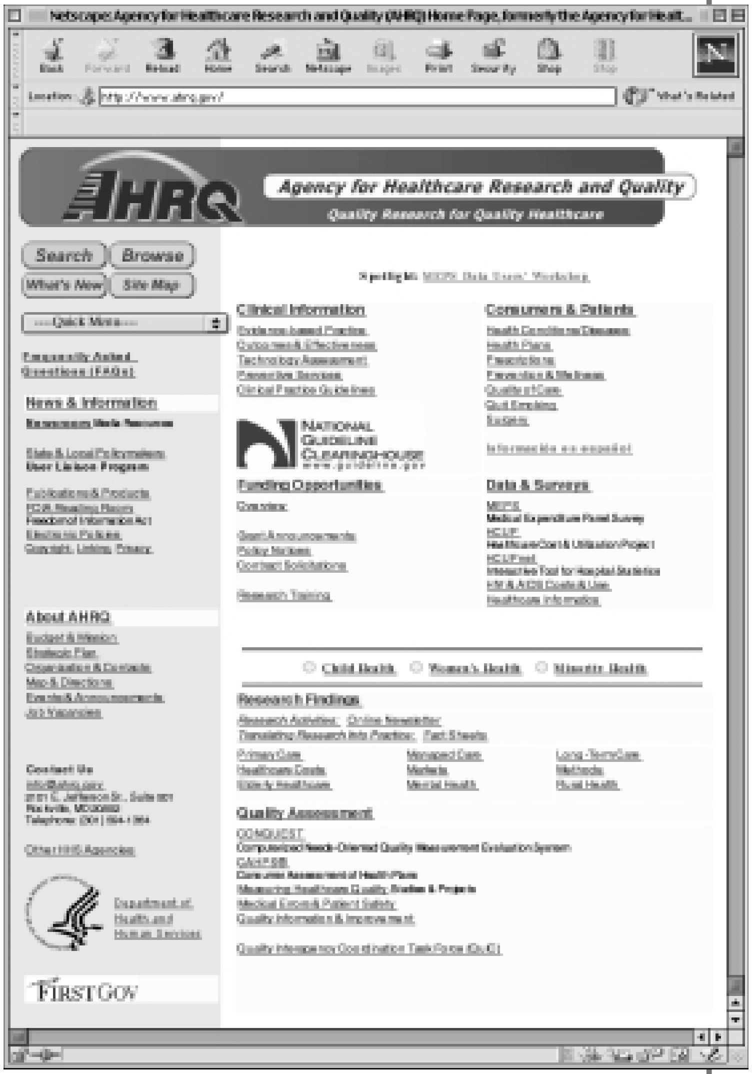

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