

Highlights

Departments

- 2** Women's Health
- 4** Clinical Decisionmaking
- 5** Outcomes/ Effectiveness Research
- 8** Primary Care
- 10** Managed Care
- 11** Elderly/Long Term Care

Regular Features

- 12** AHCPR News and Notes
- 13** Announcements
- 19** Research Briefs

HMO hospital quality may depend on where members live

A new study of hospitals used for heart bypass surgery by privately insured HMO patients suggests that plan members in some areas of the country get good quality hospital care, while those in other areas may use poorer quality facilities. The authors of the study, which was funded by the Agency for Health Care Policy and Research (HS09194), used expected-to-actual death rate ratios for heart bypass surgery—a commonly performed operation—as a measure of hospital quality.

The authors' conclusion is based on their findings showing that privately insured HMO patients in California who underwent heart bypass surgery in 1994 were more likely to be directed to hospitals with lower-than-expected death rates for the operation than those used by non-HMO patients for the surgery. California has long-established managed care markets which are mostly dominated by large HMOs.

But in Florida, where managed care arrived more recently and market areas tend to be smaller and not dominated by large HMOs, the researchers found that privately insured HMO patients were no less likely to use hospitals with average

and high heart bypass surgery rates than people insured through indemnity and preferred provider organization (PPO) plans.

The study also found that beneficiaries of the traditional Medicare program in Florida used hospitals with lower mortality rates for heart bypass surgery to a greater extent than Medicare HMO patients. The researchers were not able to examine the hospital use pattern of Medicare HMO and traditional program patients in California.

Commercial and Medicare HMOs generally pay for hospital care only if it is provided in contract facilities. Patients in indemnity insurance and PPO plans and those in traditional fee-for-service Medicare have more latitude in choosing their hospitals. The findings take into account the distance between where patients lived and the location of available hospitals.

Whether HMO patients in States other than California and Florida use higher or lower quality hospitals for heart bypass surgery is likely to depend on whether their plans use objective data to measure health

continued on page 2

Quality in HMO hospitals

continued from page 1

care quality when selecting facilities and on the degree to which plans trade off higher quality for lower prices, according to Jose J. Escarce, M.D., of RAND, who led the study. Dr. Escarce observed that HMO behavior appears to be influenced by the structure and maturity of managed care markets and by whether

employers seek good quality of care from the companies they choose to insure their workers.

For details of the study, see "Health maintenance organizations and hospital quality of care for coronary artery bypass surgery," by Dr. Escarce, R. Lawrence Van Horn, Mark V. Pauly, and others, in the September 1999 issue of *Medical Care Research and Review* 56(3), pp. 340-362. ■

Women's Health

Breast and cervical cancer screening varies by age among black and Hispanic women

Elderly women constitute most of the new cases and deaths from breast cancer. Also 25 percent of new cases of cervical cancer and 43 percent of deaths from cervical cancer are in women 65 or older. Elderly minority women bear the largest brunt of these two diseases. Yet a new study shows that elderly black and Hispanic women are screened less for breast and cervical cancer than their younger counterparts. The study, supported in part by the Agency for Health Care Policy and Research (HS08395), was conducted by researchers at Georgetown University School of

Medicine and the Johns Hopkins School of Hygiene and Public Health.

The researchers surveyed by telephone a sample of 1,420 Hispanic and black women from New York City. The Hispanic women were from Colombia, the Dominican Republic, Puerto Rico, and Ecuador, and the black women were from the United States, the Caribbean, and Haiti. The researchers asked the women about their past use of mammography, clinical breast examination (CBE), and Pap smears.

Women 65 years of age and older were 21 percent less likely than younger women to have ever had a Pap smear and 33 percent less apt to have had a Pap smear recently, after controlling for access to care, sociodemographic factors, health, time in the United States, and attitudes towards health care. However, for younger women, being in poor health increased the odds of Pap smear screening, while for elderly women, being in poor health decreased the odds of such screening. Poor health likely leads to greater interaction with the health system and an increased opportunity for screening in younger women, while there may be triaging of older women by health status, note the authors.

Being elderly also tended to be an independent but weaker predictor of CBE use, not having had a recent mammogram, and not ever having had a mammogram. The strongest predictor of breast cancer screening for all ages was having a usual source of care. Women who had a regular source of care were 200 percent more apt to have ever had or recently had both mammography and CBE. Also, women with the most negative attitudes toward cancer (anxiety, hopelessness, denial, superstition) were 40 to 60 percent less likely to have

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

continued on page 3

Cancer screening

continued from page 2

ever been screened or recently screened for breast cancer. The authors conclude that further research is needed to explain the relationships between age, health, and use of screening among minority women.

See “Breast and cervix cancer screening among multiethnic women: Role of age, health, and source of care,” by Jeanne S. Mandelblatt, M.D., M.P.H., Karen Gold, Ph.D., Ann S. O’Malley, M.D., M.P.H., and others in *Preventive Medicine* 28, pp. 418-425, 1999. ■

Women’s assessments of maternity care can guide other women seeking such care

Regardless of their different demographic and clinical characteristics, women generally agree on which hospitals provide quality maternity care, concludes a study supported by the Agency for Health Care Policy and Research (National Research Service Award training grant T32 HS00059). Thus, their assessments may be a useful guide for pregnant women selecting physicians and hospitals for such care, suggests Beth S. Finkelstein, Ph.D., of Case Western Reserve University. Dr. Finkelstein and her colleagues examined mailed survey responses assessing maternity care by 16,051 women who were hospitalized for labor and delivery over a 3-year period (1992 to 1994) in 18 hospitals in Northeast Ohio.

The women’s overall assessments of maternity care as well as physician and nursing care were significantly different for individual hospitals. Mean hospital scores were higher or lower than the sample mean for seven or more hospitals during each year of data collection. However, within individual hospitals, mean scores were reproducible over the 3 years. In addition, relative hospital rankings were stable over the 3-year period. Patient characteristics (age, race,

education, insurance status, health status, type of delivery) explained only 2 to 3 percent of the variance in patient assessments, and adjusting for these factors had little effect on hospital scores.

These findings suggest that patient assessments may be a robust method for profiling hospital quality of care. If these patient assessment findings are generalizable to other patient populations and delivery settings, these measures may be a useful tool for consumers in selecting hospitals or other health care providers. Patient assessments of care also may be one way to ensure that hospitals remain sensitive to the needs of patients, and they may serve as a balance to market forces that challenge the patient-physician relationship. Further research is needed to determine the optimal method for disseminating and presenting patient assessments to consumers in order to foster choice in the health care marketplace, notes Dr. Finkelstein.

More details are in “Patient assessments of hospital maternity care: A useful tool for consumers?” by Dr. Finkelstein, Dwain L. Harper, D.O., and Gary E. Rosenthal, M.D., in the June 1999 *Health Services Research* 34(2), pp. 623-640. ■

Also in this issue:

Treating acute deep venous thrombosis, see page 4

Calcium channel blockers for heart attack survivors, see page 5

Use of ACE inhibitors for managing heart failure, see page 6

Regional variations in spinal surgery outcomes, see page 6

Rising rates of amputation among the elderly, see page 7

Diabetes care provided by internal medicine residents, see page 8

Practice styles of HMO primary care physicians, see page 9

Increasing rates of Lyme disease in Maryland, see page 10

Effects of parental divorce on informal caregiving, see page 11

Injections of heparin seem to be safe and work as well as IV heparin for treating acute deep venous thrombosis

Patients afflicted with acute deep venous thrombosis (blood clots in a deep vein, usually of the leg or abdomen) have typically been treated in the hospital with intravenous, unfractionated heparin, an anticoagulant. A new study shows that subcutaneous injections once or twice daily of low-molecular-weight heparins (LMWHs) seem to be as safe and effective as conventional intravenous heparin. This certainly simplifies management of this condition, explains Alan M. Garber, M.D., Ph.D., of Stanford University. Unlike IV heparin, subcutaneous injections of heparin do not require laboratory monitoring of blood clotting times or dose adjustment in most cases. Furthermore, it may be possible to administer IV heparins on an outpatient basis.

With support from the Agency for Health Care Policy and Research (National Research Service Award training grant T32 HS00028), the researchers performed a meta-analysis of 11 randomized controlled trials that compared LMWH with unfractionated heparin for treatment of acute deep venous thrombosis. Compared with unfractionated heparin, LMWHs reduced mortality rates by 29 percent over 3 to 6 months of patient followup. However, LMWHs did not reduce their risk

for death from major bleeding complications or documented thromboembolic recurrences. For major bleeding complications, the odds ratio favored LMWHs (OR, 0.57; 1 is equal odds), but the absolute risk reduction was small and not statistically significant (0.61 percent). For preventing thromboembolic recurrences, LMWHs seemed as effective as unfractionated heparin (OR, 0.85).

Considering these findings and the potential that LMWHs hold for outpatient management of selected patients, these agents may prove highly cost effective for treating venous thrombosis, despite their current higher price (\$236 more per patient for the initial course of treatment compared with IV heparin). Future studies should explore the feasibility and safety of outpatient LMWH treatment in community settings, especially given the trend toward outpatient management of venous thrombosis.

See "Low-molecular-weight heparins compared with unfractionated heparin for treatment of acute deep venous thrombosis," by Michael K. Gould, M.D., M.Sc., Anne D. Dembitzer, M.D., Ramona L. Doyle, M.D., and others, in the May 18, 1999 *Annals of Internal Medicine* 130(10), pp. 800-809. ■

Parents and health care professionals don't always agree on the desirability of a fragile newborn's future quality of life

When parents have an extremely low birthweight (ELBW; 1,000 grams [about 2 pounds, 4 ounces] or less), borderline-viable infant, they and their baby's neonatologists often face critical life-threatening decisions. But parents and health care professionals do not always agree about the desirability of certain health states, should the disabled infant live.

Apparently, parents and physicians view mild to moderately disabled health states similarly. In

these cases, the children may have learning difficulties at school, require equipment to walk, and/or need some assistance with activities of daily living such as eating or using the toilet. However, health care professionals rated the desirability of severely disabled health states significantly lower than parents and adolescents who themselves were ELBW infants. In these cases, the infant may be blind, deaf, unable to walk, have problems with thinking or learning, and/or require significant help with everyday

activities. Adolescents rated acceptability of the most severely disabled states significantly higher than health care professionals, but they provided significantly lower scores than health care providers and parents for health states with milder impairments.

These findings suggest that parents may be the most appropriate people to make decisions on behalf of their infants in the neonatal intensive care unit (NICU), conclude the Canadian authors of the study.

continued on page 5

Neonatal outcomes

continued from page 4

They conducted direct interviews of 100 neonatologists from hospitals throughout Canada, 103 neonatal nurses from 3 regional NICUs, 264 adolescents (including 140 who were ELBW infants and 124 sociodemographically matched term controls), and 275 parents of the

recruited adolescents. The participants were asked to imagine living for the next 65 years in each of four to five hypothetical health states common to very premature infants. In addition, children rated their own health states—and parents rated the health states of their own children—using a standard gamble technique.

More details are in “Differences in preferences for neonatal outcomes among health care professionals, parents, and adolescents,” by Saroj Saigal, M.D., F.R.C.P., Barbara L. Stoskopf, R.N., M.H.Sc., David Feeny, Ph.D., and others, in the June 2, 1999 *Journal of the American Medical Association* 281(21), pp. 1991-1007. ■

Outcomes/Effectiveness Research

Certain long-acting calcium channel blockers appear to improve outcomes in heart attack survivors, but more research is needed

Calcium channel blockers are used widely in patients with hypertension and coronary artery disease. Recent studies suggest that the short-acting form of these medications may cause adverse cardiovascular and other problems. This study, by researchers at Harvard Medical School, Harvard School of Public Health, and the University of California School of Medicine, San Francisco, shows that the long-acting form of one class of calcium channel blockers (dihydropyridines) compared with the short-acting form was associated with markedly lower rates of death and cardiac rehospitalization in older survivors of heart attack. Nevertheless, beta blockers and aspirin have proven effectiveness after heart attack and should be the first line of therapy in eligible patients, according to the researchers. Their work was supported in part by the Agency for

Health Care Policy and Research (HS07631).

The researchers analyzed three databases from the State of New Jersey on hospital admissions for acute myocardial infarction (AMI, heart attack) and Medicare and drug claims data. They constructed a sample of Medicare patients who suffered AMI in 1989 and 1990, when both short-acting and long-acting channel blockers were in use. They then compared rehospitalization and death rates of older heart attack survivors who took short- versus long-acting dihydropyridines (chiefly nifedipine) and non-dihydropyridines (diltiazem and verapamil).

The long-acting form of dihydropyridine was associated with a 55 to 60 percent reduced risk of death over the 2 years of followup and a 40 to 45 percent reduced rate of rehospitalization for

cardiovascular disease in older survivors of heart attack. The findings were less clear for the non-dihydropyridines. Although the data suggested a reduction in risk of cardiac rehospitalization, these agents did not reduce—and may possibly have increased—the risk of death. The researchers conclude that more studies are needed before firm recommendations can be made about the appropriate use of long-acting dihydropyridines as well as to examine the effect of long-acting forms of non-dihydropyridines.

See “Effects of long-acting versus short-acting calcium channel blockers among older survivors of acute myocardial infarction,” by Matthew W. Gillman, M.D., Dennis Ross-Degnan, Sc.D., Thomas J. McLaughlin, Sc.D., and others, in the May 1999 *Journal of the American Geriatrics Society* 47, pp. 1-6. ■

More appropriate use of medications could improve outcomes of heart failure patients

Management of heart failure has advanced substantially with effective revascularization procedures and improved cardiac remodeling with angiotensin-converting enzyme (ACE) inhibitors. However, many clinicians still underuse ACE inhibitors and overuse calcium antagonists in patients with significant cardiac dysfunction. They also use this less-than-ideal approach in managing heart failure among urban blacks, who are at high risk for uncontrolled hypertension and hospitalization for heart failure, according to a study supported in part by the Agency for Health Care Policy and Research (HS07400). It shows that physicians used suboptimal dosing with ACE inhibitors for a group of urban patients—most of whom were black—who were hospitalized for heart failure, and the physicians inappropriately used calcium antagonists for 56 percent of the patients.

More appropriate use of these medications and better control of hypertension could improve the outcomes of heart failure patients, according to the study, which was conducted by researchers from the Morehouse School of Medicine and Morehouse's MEDTEP Minority Research Center. The researchers identified the clinical correlates of recurrent hospitalizations for heart failure in 1,200 patients (94 percent were black; 51 percent were women; mean age 64 years) who were admitted to the hospital for heart failure during 1995. Of these patients, 98 percent had a history of systemic hypertension, and 55 percent had uncontrolled hypertension. Sixty-five percent of patients were on ACE inhibitors (for example, enalapril and captopril), 51 percent were on calcium antagonists (for example, diltiazem and nifedipine), and 8 percent were on beta blockers.

Heart failure patients with severe left ventricular (LV) dysfunction on

calcium antagonists had a 28 percent increase in hospitalization during the 12-month study period and twice the risk of hospitalization as patients with severe LV dysfunction not on calcium antagonists. ACE inhibitors, the diuretic furosemide, and beta blocker treatments were not associated with a higher hospitalization rate, but treatment with calcium antagonists, alpha blockers, and the vasodilator hydralazine did increase the likelihood of hospitalization.

For details, see "Gender differences and practice implications of risk factors for frequent hospitalization for heart failure in an urban center serving predominantly African-American patients," by Elizabeth O. Ofili, M.D., M.P.H., Robert Mayberry, M.P.H., Ph.D., Ernest Alema-Mensah, Ph.D., and others, in the May 1, 1999 *American Journal of Cardiology* 83, pp. 1350-1355. ■

Spinal surgery probability and outcomes vary depending on where the patient lives

Spinal surgery for lumbar disc herniation and spinal stenosis, which is performed to ease a person's symptoms and improve function, is nearly always elective. The probability of undergoing spinal surgery and surgical outcome are highly dependent on the practice style of the surgeons in the area in which the patient lives, according to a study by the Back Pain Outcome Assessment Team, which is supported by the Agency for Health Care Policy and Research (HS06344 and HS08194) and led by Robert B. Keller, M.D., of the Maine Medical Assessment Foundation. The researchers are conducting an ongoing prospective study of 655 patients with herniated lumbar disc or spinal stenosis.

For this study, the researchers analyzed spinal surgery practices in three distinct areas in Maine (small-area variation analysis). They compared outcomes through 4

years of followup for 279 spine surgery patients and found that surgery rates varied more than four-fold across the three spine service areas, from 40 percent below to 72 percent above the State's average rate of such surgery. Seventy-nine percent of the patients in the low-rate area—who initially (baseline) had less severe symptoms—had marked or complete relief of leg pain compared with 60 percent of patients in the high-rate area. Patients in the low-rate area also had significantly greater improvement in disability score, quality of life, and satisfaction.

Superior outcomes in the low-rate area may be related to more stringent patient selection criteria for lumbar spine surgery, since the researchers' previous studies showed that surgery had the least benefit among patients

continued on page 7

Spinal surgery outcomes

continued from page 6

with the mildest baseline severity of disease. Surgeons in the two high-rate areas may have had a lower severity threshold for recommending surgery to their patients. The stability of the area-based surgical rates over time indicates that these local practice styles are entrenched,

and that physicians remain consistent in how they make recommendations and treat patients.

For more information, see "Relationship between rates and outcomes of operative treatment for lumbar disc herniation and spinal stenosis," by Dr. Keller, Steven J. Atlas, M.D., M.P.H., David N. Soule, B.A., and others in the June 1999 *Journal of Bone and Joint Surgery* 81(6), pp. 752-762. ■

Amputation rates rising in elderly despite treatment advances

A new study sponsored by the Agency for Health Care Policy and Research (HS07184) says older Americans with advanced lower-extremity vascular disease are at increasing risk of one day needing leg or foot amputation. Narrowed leg arteries reduce the flow of oxygen-rich blood and therefore increase the risk of infections and life-threatening gangrene. According to the researchers, who were led by Joe Feinglass, Ph.D., of Northwestern University, the increase appears to be the result of factors such as limited growth in hospitals' capacity to perform lower-extremity bypass surgery and angioplasty (a procedure for widening blocked arteries), the increasing longevity of elderly patients with cardiovascular disease, and the steady prevalence of diabetes mellitus, which contributes

to vascular disease and can cause dangerous foot ulcers.

The researchers, who looked at population-based rates of above- and below-the-knee amputation procedures for Americans by age, sex, and other factors between 1979 and 1996, found that rising rates of amputation at the beginning of the study period were initially reversed following the introduction in the early 1980s of surgical procedures for dilating or bypassing blocked leg arteries. A decline in the prevalence of hypertension, ischemic heart disease, and smoking also contributed to this reversal. However, by the mid-1990s, the downward trend flattened out and amputation rates began rising again.

By 1996, the latest year analyzed by the researchers, the combined rates for above- and below-the-knee amputations were 11 percent higher

than they had been in 1979. Also in 1996, approximately 76,000 above- and below-the-knee amputations were performed in the United States, compared with an annual average of 54,000 procedures over the 17-year study period.

The study, which was also supported by the National Heart, Lung, and Blood Institute, was based primarily on information from the National Center for Health Statistics' National Hospital Discharge Survey and National Health Interview Survey.

Details are in "Rates of lower extremity amputation and arterial reconstruction in the United States, 1979," by Dr. Feinglass, Jacqueline L. Brown, M.D., Anthony LoSasso, Ph.D., and others, in the August 1999 issue of the *Journal of the American Public Health Association* 89, pp. 1222-1227. ■

AHCPR's PORT projects have made substantial contributions to research and clinical practice, but more studies are needed

Beginning in 1989, the Agency for Health Care Policy and Research funded a set of ambitious research projects known as patient outcomes research teams (PORTs). These 14 projects were succeeded, starting in 1993, by a "second generation" of projects known as PORT-IIs. Together, AHCPR's PORTs and PORT-IIs represent a total investment of more than \$100 million to answer critical questions about the effectiveness and cost-effectiveness of available treatments for common clinical conditions. A recent article by researchers from several PORTs, as well as

Carolyn M. Clancy, M.D., Director of AHCPR's Center for Outcomes and Effectiveness Research, describes the purpose and accomplishments of the PORTs.

The PORTs were designed to take advantage of readily available data and to focus on common clinical conditions that are costly to the Medicare and Medicaid programs and for which there is regional variability in outcomes and use of resources. The PORTs are made up of a multidisciplinary team of researchers ranging from health economists and clinicians to quality-of-life

continued on page 8

AHCPR's PORT projects

continued from page 7

experts and epidemiologists. PORT investigators were instructed to answer the following questions: What works and at what cost? For which patients or subgroups of patients? When? Why is there variation in the use of treatments? What can be done to reduce inappropriate variation? From whose perspective—i.e., the patient is the ultimate judge of effectiveness. Is there a potential for development and use of patient-reported outcome measures?

PORT researchers advanced the methods and applications of outcomes and effectiveness research, that is, the examination of the end results of medical interventions when applied to patients in everyday practice. Effectiveness studies often are designed to monitor patients over time, wherever they get their care, and to chart the outcomes of that care. PORT researchers use Medicare and Medicaid data and data from insurance claims and other large administrative databases to characterize patterns of care, develop general and disease-specific outcome measures, and disseminate important outcome information to patients and physicians to reduce inappropriate practice variation and improve outcomes.

The authors point out that although PORTs represent an essential start in defining and refining the methods for producing outcomes and effectiveness measures, additional research is needed. The PORTs were limited in several dimensions. First, the majority of PORTS focused on conditions found in adults 65 and older, meaning the problems of children and middle-aged adults were largely neglected. Second, the results of PORT studies cannot be generalized to populations other than those studied. For example, PORT findings cannot be used to determine whether and when to perform knee replacements or cataract surgery on people younger than 65. Third, certain population groups may have been understudied. For example, many of the PORTS looked at differences in conditions, performance rates, and outcomes for blacks, but there may not have been sufficient data to do the same for Hispanics, Asians, and other groups.

For more information, see "Patient outcomes research teams: Contribution to outcomes and effectiveness research," by Deborah Freund, Ph.D., Judith Lave, Ph.D., Dr. Clancy, and others, in the *Annual Review of Public Health* 20, pp. 337-359, 1999. Reprints (AHCPR Publication No. 99-R073) are available from AHCPR.*



Primary Care

Internal medicine residents need training to enhance their diabetes care

According to a recent study, improvements are needed in the way internal medicine residents care for patients with adult-onset (type 2) diabetes. Residents at one large, urban hospital outpatient clinic in Atlanta, GA, did not consistently follow recommended guidelines in five areas of diabetes care: referral for dilated eye examinations, measurement of lipids, screening of urine for proteinuria, performance of foot examinations to detect nonhealing injuries, and inquiries about patient self-monitoring of blood glucose. Recent clinical trials have shown that complications of diabetes can be prevented or limited by tight control of blood glucose and

appropriate and timely interventions, thus increasing hope that outcomes can be significantly improved for patients with type 2 diabetes.

In a study that was supported in part by the Agency for Health Care Policy and Research (HS09722), the researchers surveyed internal medicine residents about how often they performed six diabetes care services advocated by the American Diabetes Association. They documented actual performance of these services by using the hospital laboratory database and reviewing the charts of 140 patients with type 2 diabetes who were seen by residents at the hospital clinic an average of five times during 1996. All patients in the study were black,

had no psychiatric or central nervous system disease, and had received a minimum of 12 months of continuing care.

Both self-described and reported performance of all services fell short of recommended standards. For example, 60 percent of residents reported that they referred patients for an annual eye exam, 50 percent said they performed annual lipid testing, and 65 percent said they screened patients yearly for urine proteins. Only 52 percent of residents claimed to perform foot exams at each visit, but 80 percent said they asked their patients how often they monitored their blood

continued on page 9

Diabetes care

continued from page 8

glucose. Ideally, responses should have been 100 percent for each service. Sixty-one percent of patients had two or fewer HbA_{1c} measurements (blood sugar indicator) in 12 months, which is less than recommended. Nearly 50

percent of patients on either oral medications or insulin had an HbA_{1c} value of more than 8 percent. Three-quarters of the residents selected a target HbA_{1c} of 7.5 or less.

The researchers conclude that appropriate modifications in graduate medical training are critical for achieving the long-term goal of

reducing the costs and complications of diabetes.

See "What do internal medicine residents need to enhance their diabetes care?" by Annette M. Bernard, M.D., M.S., Lynda Anderson, Ph.D., Curtiss B. Cook, M.D., and Lawrence S. Phillips, M.D., in the May 1999 *Diabetes Care* 22(5), p. 661-666. ■

Studies examine practices of HMO primary care physicians

A well-established group model health maintenance organization (HMO) typically serves hundreds of patients and includes several facilities staffed by primary care physicians (PCPs) who often refer patients to the same specialists. Two recent studies show that the PCPs working in HMOs: family practitioners (FPs), general internal medicine physicians (GIMs), and subspecialist internal medicine doctors (SIMs), provide similar quality of care and differ little in their use of health resources. These studies, which are summarized here, were supported by the Agency for Health Care Policy and Research (HS08269) and led by Joe Selby, M.D., of the Division of Research, Kaiser Permanente, Northern California.

Grumbach, K., Selby, J.V., Schmittiel, J.A., and Quesenberry Jr., C.P. (1999, June). "Quality of primary care practice in a large HMO according to physician specialty." *Health Services Research* 34(2), pp. 485-502.

There are few differences in the quality of primary care delivered by FPs, GIMs, and SIMs, according to this study. Patients were remarkably similar in their ratings of quality of primary care and satisfaction. They rated GIMs higher than FPs on coordination (adjusted mean scores of 68 vs. 58.4) and slightly higher on accessibility and prevention. They rated GIMs more highly than SIMs on comprehensiveness (adjusted mean scores of 76.4 vs. 73.8). There were no significant differences between specialty groups on a variety of measures of patient satisfaction.

In some settings, practice organization may have more influence than physician specialty on the delivery of primary care, conclude the researchers. In 1995, they surveyed 10,608 patients who visited 60 FPs, 245 GIMs, and 55 SIMs at 13 facilities in the Kaiser Permanente Medical Care Program of Northern California.

Overall, physicians scored much higher on procedurally oriented prevention services such as flu shots and breast exams than on health promotion counseling. On average, patients recalled discussing only

about half of "lifestyle" health promotion items such as diet and exercise with their PCPs. Patients recalled discussing even fewer items of a more social nature, such as their emotional health and sexuality.

Selby, J.V., Grumbach, K., Quesenberry Jr., C.P., and others. (1999, June). "Differences in resource use and costs of primary care in a large HMO according to physician specialty." *Health Services Research* 34(2), pp. 503-518.

SIMs typically use more medical resources than GIMs and FPs. However, when these primary care physicians practice in the same HMO, these specialty differences are small, concludes this study. It may be that within the same HMO medical group, uniform incentives and a common "culture" reduce or eliminate primary care practice differences, explain the researchers.

They compared the use of resources and costs of health care services provided by these three physician specialties to a group of adult primary care patients in 13 HMO facilities of the Kaiser Permanente Medical Care Program in Northern California in 1995 and 1996. The researchers found that hospitalization rates and inpatient days did not differ between patients of FPs and GIMs after adjusting for patient case mix. Patients of SIMs had 33 percent higher hospitalization rates and 23 more hospital days than patients of GIMs. However, there were no differences in outpatient visits for the three types of primary care physicians. Patients of FPs made slightly fewer primary care visits on average than patients of GIMs and 14 percent fewer visits than patients of SIMs. However, patients of FPs made about 19 percent more urgent care visits than did patients of GIMs. Thus, modest savings from a lower use of four specialty areas (dermatology, psychiatry, gynecology, and orthopedics) by patients of FPs were offset by the more frequent use of urgent care and of other specialty care. However, there was little difference in overall health resource use and total costs among the HMO physicians. ■

Incidence of Lyme disease in Maryland is on the rise

Since the first Lyme Disease (LD) case was reported in Maryland in 1979, the number of reported cases has steadily increased. From 1993 to 1996, the incidence rate (IR) of LD increased by 51 percent, from 3.9 to 8.3 cases per 100,000 Maryland residents. These are the findings of a study supported by the Agency for Health Care Policy and Research (HS07813).

The overall IR for the State during the study period was 7 cases per 100,000 inhabitants, with the IR varying by region, sex, and age. The IR ranged from 0.7 in Allegheny County in Western Maryland to 88.3 in Kent County on Maryland's Upper Eastern Shore. In fact, counties in the Upper Eastern Shore had the highest IR per age group, sex, and jurisdiction, while the IR was lowest in Maryland's Western counties, where no LD cases were reported for patients younger than 10 or older than 59 years of age.

This pattern of LD distribution in Maryland has not changed since 1989, when LD became a reportable disease in the State, and is supported by a State-wide survey of ticks from white-tailed deer. It showed that the percentage of ticks infected with *Borrelia burgdorferi*, the infectious agent that causes LD, ranged from 0 percent in Western Maryland counties to 15 percent in regions of the Upper and Lower Eastern Shore.

The current study also found that males were 1.2 times more likely to contract LD than females (IR of 7.7 vs. 6.2). The IR peaked in the 10 to 19 age group (IR of 8.5), 50 to 59 age group (IR of 8.9), and the 20 to 29 age group (IR 3.9). Outdoor activities (for example, hunting), type of clothing, and use of tick repellents may play an important role in the different LD IR between males and females and by age group. Also, women are more apt to seek medical attention after a tick bite or the first signs of the disease, which would make a difference in the IR. The bimodal age distribution also may be explained by the type of activities in which the youngest and oldest age groups are involved. However, the authors were unable to determine why the 20 to 29 year age group had the lowest IR.

These findings are based on a State-wide surveillance for LD in 24 Maryland jurisdictions from 1993 to 1996, using the Maryland Lyme Disease Registry. The study was carried out by Cesar A. Pena, D.V.M., M.H.S., and George T. Strickland, M.D., Ph.D., of the University of Maryland School of Medicine.

More details are in "Incidence rates of Lyme disease in Maryland: 1993 through 1996," by Drs. Pena and Strickland, in the March/April 1999 *Maryland Medical Journal* 48(2), pp. 68-73. ■

Managed Care

"Drive-through deliveries" were more than 18 times as likely in 1994 as in 1990, regardless of payer

Consumer furor in the early 1990s over "drive-through" deliveries, 1-day hospital stays for uncomplicated vaginal childbirth, was aimed primarily at health maintenance organizations (HMOs), who were viewed as placing cost savings above quality of care. Eventually, Federal legislation in 1996 mandated minimum 2-day stays nationwide for uncomplicated vaginal deliveries and 4-day stays for cesarean sections.

Blaming HMOs for "drive-through deliveries" was not entirely justified, concludes a study supported in part by the Agency for

Health Care Policy and Research (HS09325). Using New Jersey hospital discharge data, the study demonstrates that HMOs in New Jersey were more aggressive than other types of insurers in reducing hospital stays for uncomplicated vaginal delivery to 1 day. Following passage of the Health Care Reform Act of 1992—which eliminated the State's hospital rate-setting system—insurers were free to negotiate price discounts with hospitals, including per diem contracts. Though few data are available, many believe that HMOs were more aggressive than other insurers in switching from

case-based to per diem rates. This provided HMOs with a strong incentive to aggressively trim length of stay after 1992.

In fact, the researchers found that the percentage of 1-day stays increased from less than 4 percent for all payers in 1990 to 48 percent for HMO patients and 32 percent for non-HMO patients in 1994. Controlling for other factors affecting length of hospital stay, the odds of an HMO patient staying

continued on page 11

“Drive-through deliveries”

continued from page 10

1 day were nearly twice as great as a non-HMO patient by 1994.

On the other hand, by 1994, a woman had 18 times the odds of a 1-day stay than she did in 1990, irrespective of her insurer. By 1994, the cost-cutting mechanisms, such as utilization review and denial of service coverage by different insurers were probably more similar than different, note Kevin G.M.

Volpp, M.D., Ph.D., of Harvard Medical School, and M. Kate Bundorf, M.B.A., M.P.H., of the University of Pennsylvania. They used hospital patient discharge data from the New Jersey Department of Health to examine differences in length of stay for normal, uncomplicated deliveries between patients in HMOs and those not in HMOs.

The strong secular trend toward shorter stays for uncomplicated

deliveries suggests that HMOs may have been unjustly targeted. The researchers conclude that legislation and regulations should be targeted at particular policies rather than insurers.

See “Consumer protection and the HMO backlash: Are HMOs to blame for drive-through deliveries?” by Dr. Volpp and Ms. Bundorf, in the Spring 1999 *Inquiry* 36, pp. 101-109. ■

Elderly/Long-Term Care

Divorce reduces informal caregiving and economic ties between elderly parents and their adult children

Divorce can negatively affect the parent-child relationship even in the latter part of life, weakening economic ties and reducing informal caregiving, according to a new study which examined the effects of family structure on the relationship between elderly parents (age 70 or older) and their adult children. The study found, for example, that divorced elderly parents, particularly fathers, are less likely than are widowed elderly parents to have adult children willing to provide them with informal care.

The researchers, Barbara Steinberg Schone, Ph.D., of the Agency for Health Care Policy and Research, and Liliana E. Pezzin, Ph.D., of the Johns Hopkins University School of Medicine, point out that the nuclear family, a concept based on close genetic and blood ties, is rapidly being replaced by new family patterns due to the high rate of divorce. Their study focused on unmarried (divorced or widowed) parents and their children and looked at four aspects of assistance: parents living with adult children; financial assistance to adult children; and, among disabled elderly parents, adult children’s provision of informal care and parental use of formal (paid) care.

The researchers found that the ties to children may be weaker when parents are divorced, and older, divorced parents may provide less financial assistance to their children. In addition, disabled or frail parents may not be able to count on personal and economic support from their children. These findings raise concerns about future generations of elderly parents, who will have experienced higher rates of divorce and therefore may

place greater demands on public and social insurance programs for assistance.

The study, based on data from the first wave of the Assets and Health Dynamics of the Elderly (AHEAD) survey, found that:

- Divorced fathers are particularly vulnerable to receiving less care in later life due to weaker ties with their children. They are much less likely to live with an adult child and to receive fewer hours of informal care.
- Ties to stepchildren are not as strong as ties to biological children. Elderly stepparents are more likely to purchase formal care and provide less cash assistance to their stepchildren than to biological children. Elderly parents also are more likely to be sensitive to the characteristics—such as economic and marital status—of their biological children, but the same cannot be said for their stepchildren.
- Ties to children are further weakened by remarriage. Remarried parents receive less informal care from their children, purchase more hours of formal care, and provide less cash assistance to their children than parents who were married only once.

These and other findings can be found in “Parental marital disruption and intergenerational transfers: An analysis of lone elderly parents and their children,” by Drs. Schone and Pezzin in the August 1999 issue of *Demography* 36(3), pp. 287-297. Reprints (AHCPR Publication No. 99-R079) are available from AHCPR. ** ■

Donald M. Berwick, M.D., named as chair of AHCPR's national advisory council

AHCPR Administrator John M. Eisenberg, M.D., has named Donald M. Berwick, M.D., M.P.P., as chair of the National Advisory Council for Health Care Policy, Research, and Evaluation. Dr. Berwick, who was appointed to the Council in the fall of 1998, will serve a 1-year term as chairman. He replaces Harold S. Luft, Ph.D. The Council provides advice and recommendations to the Administrator of AHCPR and to the Secretary of the Department of Health and Human Services on priorities for a national health services research agenda.

Dr. Berwick is President and CEO of the Institute for Healthcare Improvement based in Boston, MA. He is a practicing pediatrician at Boston Children's Hospital and also serves as Associate Professor of Pediatrics at the Harvard Medical School and Associate Professor of Health Policy and Management at Harvard's School of Public Health.

He was Vice Chair of the U.S. Preventive Services Task Force from 1990 through 1996. In 1996, Dr. Berwick was named the first "independent member" of the Board of Trustees of the American Hospital Association. He also served from 1989 through 1991 as a member of the panel of judges for the Malcolm Baldrige National Quality Award program.

Dr. Berwick was co-founder and co-principal investigator for the National Demonstration Project on Quality Improvement in Health Care. He is a past president of the International Society for Medical Decisionmaking and is an elected member of the Institute of Medicine of the National Academy of Sciences. In April 1997, he was appointed by President Clinton to serve on the Advisory Commission on Consumer Protection and Quality in the Healthcare Industry, which was co-chaired by the Secretaries of Health and Human Services and

Labor. He has published extensively on health care policy, decision analysis, technology assessment, and health care quality management. Dr. Berwick is a summa cum laude graduate of Harvard College and holds an M.P.P. degree from the John F. Kennedy School of Government; he earned his M.D. cum laude from the Harvard Medical School.

AHCPR's 24-member National Advisory Council comprises 17 private-sector experts, representing health care plans, providers, purchasers, consumers, and researchers. The Council also includes representatives of seven Federal agencies: the National Institutes of Health; the Department of Defense; the Centers for Disease Control and Prevention; the Department of Veterans Affairs; the Substance Abuse and Mental Health Services Administration; the Food and Drug Administration; and the Health Care Financing Administration. ■

AHCPR's evidence centers will examine quality screening, cancer risk reduction, and other health care issues

The Agency for Health Care Policy and Research's Administrator, John M. Eisenberg, M.D., has announced new research topics for the Agency's Evidence-based Practice Centers (EPCs). The new assignments range from finding measures to help hospitals and others spot quality-of-care problems to examining the evidence for behavioral dietary interventions to reduce cancer risk. EPCs, which serve as science partners to the Agency, synthesize their findings in reports that AHCPR publishes.

The evidence search for quality-of-care indicators assigned to the University of California, San Francisco (UCSF)-Stanford University EPC will focus largely on indicators that could be used to screen pediatric

admissions, inpatient care for chronic medical conditions, and potentially avoidable hospital admissions (admissions that might have been avoided had the patients been managed appropriately at the primary care level).

The findings will be used by AHCPR to enhance the utility of its quality screening software tool, the Hospital Cost and Utilization Project (HCUP) Quality Indicators, which is currently being used by hospitals and others to improve care. The upgrade, expected to be ready by 2001, will also include state-of-the-art risk adjustment

continued on page 13

Evidence centers

continued from page 12

methods so users can compare hospital quality over time and across communities.

As part of its assignment, the UCSF-Stanford EPC will solicit recommendations from researchers and developers on potential measures of hospital quality, including those that are not yet part of the published literature.

The other assignments and the nominating organizations are:

- Complementary and alternative medicine: Use of garlic for cardiovascular disease and cancer, and use of *Silybum marianum* for liver disease and cirrhosis, University of Texas Health Sciences Center, San Antonio EPC. Nominated by the National Center for Complementary and Alternative Medicine, National Institutes of Health.
- Criteria for the referral of patients with epilepsy, MetaWorks EPC, Boston, MA. Nominated by the Centers for Disease Control and Prevention.

- Diagnosis and management of osteoporosis, Oregon Health Sciences University EPC, Portland, OR. Nominated by the National Institute of Arthritis, Musculoskeletal and Skin Diseases, National Institutes of Health.
- Efficacy of behavioral dietary interventions to reduce cancer risk, Research Triangle Institute and University of North Carolina at Chapel Hill EPC, Chapel Hill, NC. Nominated by the National Cancer Institute, National Institutes of Health.
- Medical informatics and telemedicine coverage under the Medicare program, Oregon Health Sciences University EPC, Portland, OR. Nominated by the Health Care Financing Administration.
- Treatment of pulmonary disease following spinal cord injury, Duke University EPC, Durham, NC. Nominated by the Consortium for Spinal Cord Medicine. ■

Announcements

New MEPS reports are now available

Several new reports are now available that present findings from the Medical Expenditure Panel Survey (MEPS). MEPS is the third in a series of nationally representative surveys of medical care use and expenditures sponsored by the Agency for Health Care Policy and Research. MEPS is cosponsored by the National Center for Health Statistics (NCHS). The first of these surveys, the National Medical Care Expenditure Survey (NMCES), was conducted in 1977, and the second, the National Medical Expenditure Survey (NMES), was carried out in 1987.

MEPS collects detailed information on health care use and expenses, sources of payment, and insurance coverage of individuals and families in the United States. The reports summarized here are

available from AHCPR.* Please see the back cover of *Research Activities* for ordering information.

In addition, the MEPS 1996 Medical Conditions (HC-006) public use data file is now available for downloading on the MEPS Web site at <http://www.meps.ahcpr.gov/data.htm>. This file is the first medical conditions public use data file to be released from the 1996 Medical Expenditure Panel Survey Household Component (MEPS HC). It consists of 1996 data obtained in Panel 1, Rounds 1, 2, and 3 of the survey and contains variables pertaining to household-reported medical conditions including accidents and injuries, ICD-9-CM diagnosis and procedure codes, and alternative care.

For more information about MEPS, visit AHCPR's Web site at <http://www.ahcpr.gov/> and click on "Data and Surveys."

Health Care Use in America, 1996. MEPS Highlights No. 9 (AHCPR Publication No. 99-0029).

This report examines variations in the use of health care services among selected subgroups of the U.S. civilian noninstitutionalized population in 1996. It is based on the more detailed publication, *Use of Health Care Services, 1996* (AHCPR Publication No. 99-0018).^{*} Major highlights include the following. About 75 percent of Americans had at least one ambulatory care visit with either a physician or nonphysician provider

continued on page 14

MEPS reports

continued from page 14

rounds of data collection that cover calendar year 1996. It also provides an overview of the weighting strategies used to obtain national estimates of health care parameters for the population. Survey design complexities that require special consideration for variance estimation and analysis are discussed.*

List Sample Design of the 1996 Medical Expenditure Panel Survey Insurance Component. MEPS Methodology Report No. 6 (AHCPR Publication No. 99-0037).

The Insurance Component (IC) of MEPS collects employment-related health insurance information, such as premiums and types of plans offered. Respondent characteristics—such as size of

business, employee characteristics, and type of industry—also are collected. This report outlines the process used to allocate and select the MEPS IC list sample, including goals, development of allocation schemes, and selection methods. The list sample is collected from samples developed from three lists that together cover almost 100 percent of the employers in the United States.* ■

New AHCPR report provides detailed information on hospital use and costs in the United States

The most common reasons for hospital admission in the United States are births (3.8 million admissions), followed by coronary atherosclerosis (1.4 million admissions), pneumonia (1.2 million admissions), congestive heart failure (990,000 admissions), and heart attack (774,000 admissions), according to a new report published by the Agency for Health Care Policy and Research.

The report—which is based on 1996 data—is the latest in a series of statistical publications from AHCPR showing why Americans are hospitalized, how long they stay in the hospital, which procedures they undergo, and how much the charges are for their stays. It presents an in-depth profile of inpatient care and answers many key questions about how specific conditions are treated in hospitals and the resulting outcomes.

According to the report, the most expensive conditions, or diagnoses, treated in U.S. hospitals in 1996 were spinal cord injury (\$56,800 average charges per hospital admission), infant respiratory distress

syndrome (\$56,600), low birthweight (\$50,300), leukemia (\$46,700), and heart valve disorders (\$45,300). The figures are average charges for the entire stay.

Overall, patients stayed in the hospital an average of 5 days. But stays involving premature birth, with problems such as low birthweight and slow growth of the fetus, averaged 23 days. Stays because of infant respiratory distress syndrome averaged 22 days, and patients with spinal cord injuries remained in the hospital an average of 16 days.

The estimates are based on all-payer data from AHCPR's Nationwide Inpatient Sample, which approximates a 20-percent sample of U.S. community hospitals. The database is part of the Healthcare Cost and Utilization Project, a Federal-State-industry partnership to make high-quality hospital data available for research purposes.

Hospital Inpatient Statistics, 1996 (AHCPR Publication No. 99-0034) is available from AHCPR.* ■

MEPS reports

continued from page 13

during 1996. Use of ambulatory care and dental care was lower among blacks and Hispanics than among whites and others combined. Over 60 percent of the civilian noninstitutionalized population who died during 1996 (compared with only 7 percent of the rest of the population) had a hospitalization during the year. Among people under age 65, the uninsured were the least likely to have had any outpatient care or to have had a prescription medicine. Elderly people (over age 65) were the age group most likely to have had at least one prescription medicine.*

Nursing Home Trends, 1987 and 1996. MEPS Chartbook No. 3 (AHCPR Publication No. 99-0032).

This chartbook presents estimates on the nursing home market and characteristics of the nursing home population. Nursing home facilities and residents in 1987 and 1996 are compared. Information on special care units is given for 1996 only. The number of nursing homes and the number of nursing home beds both increased almost 20 percent from 1987 to 1996; 73 percent of nursing homes were certified by both Medicare and Medicaid in 1996, up from 28 percent in 1987. Passage of the Omnibus Budget Reconciliation Act of 1987 reduced the incentive to remain certified by Medicaid only. Growth in the elderly population outpaced growth in the supply of nursing home beds. Nursing homes were caring for an older population in 1996 than in 1987. Moreover, functional disability among nursing home residents increased: 83 percent of residents in 1996 needed help with three or more activities of daily living, compared with 72 percent in 1987. As for special care units, a relatively new phenomenon, the

most common type in 1996 was for patients with Alzheimer's and related dementias.*

Health Insurance Status of the Civilian Noninstitutionalized Population, 1997. MEPS Research Findings No. 8 (AHCPR Publication No. 99-0030).

This report provides preliminary estimates of the health insurance status of the civilian noninstitutionalized U.S. population during the first half of 1997, including the size and characteristics of the population with private health insurance, with public insurance, and without any health care coverage. During this period, 83.2 percent of all Americans were covered by private or public health insurance, leaving 16.8 percent of the population, some 44.6 million people, uninsured. Among the non-elderly population, 81.1 percent of Americans had either private or public coverage, and 18.9 percent of the population (44.2 million people) were without health care coverage. The probability that an individual would be uninsured during this period was especially high for young adults aged 19 to 24 and members of racial and ethnic minorities (especially Hispanic males). Public health insurance continues to play an important role in ensuring that children, black Americans, and Hispanic Americans obtain health care coverage.*

Changes in the Medicaid Community Population, 1987-1996. MEPS Research Findings No. 9 (AHCPR Publication No. 99-0042).

This report uses MEPS data and NMES data to compare the composition of the noninstitutionalized Medicaid population in 1996 and 1987. The Medicaid community population grew significantly over this time period, at the same time as a number

of expansions in eligibility rules extended Medicaid coverage to people not receiving cash assistance. In both years, children, the elderly, minorities, and the nonworking population were more likely than others to be enrolled in Medicaid, as were the sick and disabled. Children made up nearly half of the Medicaid community population in both years. The composition of the Medicaid community population shifted slightly but significantly over the decade. There were relatively higher proportions of whites and men and relatively lower proportions of women and blacks enrolled in Medicaid in 1996 than in 1987. The proportion of the total Medicaid community population made up of non-elderly adults fell during this time period, but a much greater proportion of these non-elderly Medicaid adults were employed in 1996 than in 1987. Also, in 1996 many more of the parents of Medicaid-enrolled children worked. These shifts have significant implications for the administration of Medicaid.*

Estimation Procedures in the 1996 Medical Expenditure Panel Survey Household Component. MEPS Methodology Report No. 5 (AHCPR Publication No. 99-0027).

The Household Component (HC) of MEPS produces national and regional estimates of the health care use, expenditures, sources of payment, and insurance coverage of the U.S. civilian noninstitutionalized population. The HC sample design is a stratified multistage area probability design with disproportionate sampling to facilitate the selection of an oversample of minorities. This report provides an overall summary of HC sample yields across the three

continued on page 15

AHCPR makes uniform State hospital data more accessible to researchers

The State Inpatient Databases (SID), created by the Agency for Health Care Policy and Research's Healthcare Cost and Utilization Project, are a powerful set of hospital databases from data organizations in 22 participating States. Researchers and policymakers use the SID to identify State-specific trends in inpatient care utilization, access, charges, and outcomes; investigate questions unique to one State; compare data from two or more States; and conduct market area research or small area variation analyses.

- Each SID database contains the universe of the inpatient discharge abstracts in that State, translated into a uniform format to facilitate multi-State analyses.
- Together, the SID contain data on more than half of all U.S. community hospital discharges. Some States include discharges from specialty facilities such as psychiatric hospitals.
- The SID contain a core set of clinical and nonclinical information on all patients, regardless of payer, including people covered by Medicare, Medicaid, private insurance, and the uninsured.
- In addition to the core set of uniform data elements common to all SID, some of the databases are enhanced to include other elements, such as the patient's race.

The 22 States participating in SID are:

Arizona	Massachusetts*
California*	Missouri
Colorado*	New Jersey*
Connecticut	New York*

Florida	Oregon*
Georgia	Pennsylvania
Hawaii	South Carolina*
Illinois	Tennessee
Iowa	Utah
Kansas	Washington*
Maryland	Wisconsin*

*States with SID files available through a central distributor as of September 1999 (see the AHCPR Web site for an updated listing).

What's in the SID?

More than 100 clinical and nonclinical variables that are part of a hospital discharge abstract. These include:

- Principal and secondary diagnoses.
- Principal and secondary procedures.
- Admission and discharge status.
- Patient demographics (e.g., sex, age, and, for some States, race).
- Expected payment source (e.g., Medicare, Medicaid, private insurance, self-pay; and for some States, additional discrete categories such as managed care).
- Total charges.
- Length of stay.
- For some States, hospital and county identifiers that permit linkage to the American Hospital Association Annual Survey files and the Area Resource File.

The SID can be run on desktop computers with a CD-ROM reader.

The SID come with full documentation in ASCII format for ease of use with various off-the-shelf software products, including SAS and SPSS. SAS users are provided programs for converting the ASCII files.

The SID are among the family of databases and software tools developed as part of the Healthcare Cost and Utilization Project, a Federal-State-industry partnership sponsored by AHCPR to build a multi-State health care data system for health services research, health policy analysis, and quality measurement and improvement.

As of September 1999, 11 SID files for 1995 and 1996 data are available through an AHCPR-sponsored central coordinator and distributor; 1997 files will be available in spring 2000. Contact the HCUP SID Coordinator (The MEDSTAT Group, 5425 Hollister Avenue, Suite 401, Santa Barbara, CA 93111; phone 805-681-5876; fax 805-681-5888; e-mail hcupsid@medstat.com) for application kits to purchase the 11 centrally available SID and more detailed, descriptive information on the SID. Information on how to obtain uniformly formatted SID files from the other 11 States is also available from the SID Coordinator.

Visit AHCPR's Web site at <http://www.ahcpr.gov> for more information on HCUP databases, software tools, and other products, or send your request via e-mail to hcup@ahcpr.gov. ■

Abstracts for the 6th annual “building bridges” conference are due in mid-November

Atlanta, GA, will be the site of the sixth annual Building Bridges Research Conference, which will be held April 6-7, 2000, at the Grand Hyatt Atlanta in Buckhead. The Building Bridges Conference series—jointly presented by the American Association of Health Plans (AAHP), the Agency for Health Care Policy and Research, and the Centers for Disease Control and Prevention (CDC)—is a collaborative initiative that brings together the managed care and health services research communities.

The theme of this year’s conference is “The Road to Quality Care: Using Research to Drive Quality Improvement.” Attendees will have an opportunity to meet and learn from leaders in health services research, academia, government, and managed care organizations on the effective translation of research findings—from clinical, health services, and translational research—into health care delivery improvements.

The conference planning committee is currently soliciting papers for oral and poster session presentations. Interested professionals working in clinical or health services research are invited to submit abstracts detailing their research. The Committee is primarily interested in papers that provide quantitative or qualitative data on outcomes and/or results of specific projects or programs, rather than descriptive, narrative presentations.

Abstracts are due November 15, 1999. Topics for the call for papers include:

- Eliminating missed opportunities for prevention.
- Demonstrating return on investment.
- Using health services research to define performance measurement goals and promote accountability.
- Research on special topics (including children’s health, mental health, alternative medicine, ethnic disparities, and behavioral changes to promote health and wellness).

In addition, there is a general category for poster sessions; abstracts submitted for poster presentations need not address one of the specified topics but may reflect work in broader areas of interest to conference attendees.

Abstract submission forms and instructions are available in the preliminary conference brochure. To request a copy of the brochure, contact AAHP at 202-778-3222 or send an e-mail to Jill Arent, the conference coordinator, at Jarent@aahp.org. Or, you may visit AAHP’s Web site at www.aahp.org and click on “Conference Calendar.” ■

Announcing an upcoming conference:

“Crafting the Future of American Indian and Alaska Native Health Into the Next Millennium” will be held December 9-11, 1999, in San Diego, CA, at the Westin Horton Plaza Hotel. It will focus on strengthening existing relationships and forming new collaborations among tribes, urban Indian health programs, tribal colleges, and academic medical centers and universities regarding the future of American Indian and Alaska Native health.

The conference is being cosponsored by the Indian Health Service and the Center for Native American Health at the University of Arizona and will immediately follow the National Indian Health Board’s 17th annual consumer conference, also being held in San Diego. The Agency for Health Care Policy and Research is also providing support for this meeting.

For registration and other information, contact Susie Warner at 301-493-9674 or by e-mail to warner@computer-craft-usa.com. ■

AHCPR funds new projects

The following research projects and cooperative agreements were funded recently by the Agency for Health Care Policy and Research. Readers are reminded that findings usually are not available until a project has ended or is nearing completion.

Research Projects/Cooperative Agreements

Assessing the performance of alternative risk adjusters

Project director: Lisa I. Iezzoni, M.D.
Organization: Beth Israel Deaconess Medical Center
Boston, MA
Project number: AHCPR grant HS10152
Project period: 9/30/99 to 9/29/02
First year funding: \$630,400

Asthma care quality in varying managed Medicaid plans

Project director: Tracy Lieu, M.D.
Organization: Harvard Pilgrim Health Care
Boston, MA
Project number: AHCPR grant HS09935
Project period: 9/1/99 to 3/31/01
First year funding: \$273,961

Asthma school initiative: Evaluating three models of care

Project director: Mayris P. Webber, Ph.D.
Organization: Montefiore Medical Center
Bronx, NY
Project number: AHCPR grant HS10136
Project period: 9/1/99 to 8/31/02
First year funding: \$308,465

Conditional length of stay: A pediatrics outcome measure

Project director: Jeffrey H. Silber, M.D., Ph.D.
Organization: Children's Hospital
Philadelphia, PA
Project number: AHCPR grant HS09983
Project period: 9/1/99 to 8/31/02
First year funding: \$399,971

Oral health intervention trial in older adults

Project director: Mark E. Moss, D.D.S., Ph.D.
Organization: University of Rochester
Rochester, NY
Project number: AHCPR grant HS10120
Project period: 9/1/99 to 8/31/02
First year funding: \$320,727

Organizational characteristics and chronic disease care

Project director: Patrick J. O'Connor, M.D.
Organization: Health Partners Research
Foundation
Minneapolis, MN
Project number: AHCPR grant HS09946
Project period: 9/1/99 to 8/31/02
First year funding: \$488,307

Socioeconomic disparities and managed care utilization

Project director: Peter Franks, M.D.
Organization: Highland Hospital
Rochester, NY
Project number: AHCPR grant HS09963
Project period: 9/1/99 to 8/31/01
First year funding: \$197,548

Small Grants

Effects of differential cost-sharing in the elderly

Project director: Stephen B. Soumerai, Sc.D.
Organization: Harvard Medical School
Boston, MA
Project number: AHCPR grant HS09855
Project period: 9/1/99 to 8/31/00
Funding: \$85,329

Evaluation of a three-tier co-pay

Project director: Brenda R. Motheral, Ph.D.
Organization: University of Arizona
Tucson, AZ
Project number: AHCPR grant HS10066
Project period: 9/1/99 to 8/31/00
Funding: \$73,614

Conference Grant

What do we know about employer risk adjusting?

Project director: Thomas McGuire, Ph.D.
Organization: Boston University
Boston, MA
Project number: AHCPR grant HS10077
Project period: 9/15/99 to 4/15/00
Funding: \$41,177 ■

Adams, A.S., Soumerai, S.B., and Ross-Degnan, D. (1999). “Evidence of self-report bias in assessing adherence to guidelines.” (AHCPR grant HS07357). *International Journal for Quality in Health Care* 11(3), pp. 187-192.

This study found that physicians tend to overestimate their adherence to practice guidelines, and thus, their self-reports of guideline use are not a reliable measure of quality of care. The researchers conducted a meta-analysis of 10 studies conducted between 1980 and 1996 of actual and self-reported physician adherence to practice guidelines. They found that clinicians overestimated their adherence to clinical practice guidelines by a median of 27 percent in 87 percent of comparisons of self-reported versus objectively obtained rates. Guidelines ranged from cancer and cholesterol screening to prevention of sexually transmitted diseases and drug treatments for conditions ranging from anxiety and heart attack to diarrhea. Physicians consistently overestimated their adherence to practice guidelines for four clinical services: mammography, breast exam, rectal exam, and testing for occult blood. This may be due to interviewer bias, or it may mean that physicians are simply reacting to what they think is expected of them. The researchers conclude that the increasing reliance on physician reports of adherence to practice guidelines as a measure of quality of care appears to greatly overestimate actual performance.

Goldie, S.J., Kuntz, K.M., Weinstein, M.C., and others. (1999, May). “The clinical effectiveness and cost-effectiveness of screening for anal squamous intraepithelial lesions in homosexual and bisexual HIV-positive men.” (NRSA

training grant T32 HS00060). *Journal of the American Medical Association* 281(19), pp. 1822-1829.

Homosexual and bisexual men infected with HIV are at increased risk for human papilloma virus-related anal neoplasia and anal squamous cell carcinoma (SCC). These researchers developed a model to calculate lifetime costs, life expectancy, and quality-adjusted life expectancy for no screening versus several screening strategies for anal squamous intraepithelial lesions (ASIL, precursor to anal SCC) and anal SCC using anal Pap testing at different intervals for a hypothetical group of homosexual and bisexual HIV-positive men in the United States. They found that screening with anal Pap tests every 2 years, beginning in early HIV disease (CD4 cell count greater than 500) resulted in a 2.7-month gain in quality-adjusted life expectancy for an incremental cost-effectiveness ratio of \$13,000 per quality-adjusted life year saved. Yearly screening with anal Pap tests provided additional benefit at an incremental cost of \$16,600 per quality-adjusted life year saved. If screening was not initiated until later in the course of HIV disease (CD4 count less than 500), then yearly Pap test screening was preferred due to the higher prevalence of anal disease (cost-effectiveness ratio of less than \$25,000 per quality-adjusted life years saved compared with no screening). Screening every 6 months provided little additional benefit over yearly screening.

Lenert, L.A., Treadwell, J.R., and Schwartz, C.E. (1999). “Associations between health status and utilities: Implications for policy.” (AHCPR grants HS08349 and HS08582). *Medical Care* 37(5), pp. 479-489.

This study examines the impact of depression and health status on how individuals evaluate their current and hypothetical health states. It shows that patients in poor health tend to overvalue their current health relative to the most similar hypothetical state. In contrast, patients in good health tend to undervalue their current health state. The researchers did a cross-sectional study of 139 patients from three large primary care practices with various medical illnesses complicated by symptoms of depression. They measured the patients' health status, responses to a standard gamble, and scale preference measurements for patients' current health and for three hypothetical health states. Utilities for the best and worst states were similar across different levels of health status. However, standard gamble utilities for intermediate health states were higher for patients in poorer health than patients in better health. In patients with depressive illnesses, there were significant interactions between health and values that could result in systematic undervaluation of the health effects of treatments that primarily benefit more severely ill patients.

Monheit, A.C., Schone, B., and Taylor, A.K. (1999, Spring). “Health insurance choices in two-worker households: Determinants of double coverage.” *Inquiry* 36, pp. 12-29.

Sixty percent of two-earner non-elderly couples chose double health insurance coverage in 1987, according to an analysis of data from the 1987 National Medical Expenditure Survey (NMES), a

continued on page 20

Research briefs

continued from page 19

national household survey conducted by researchers at the Agency for Health Care Policy and Research. In these cases, a working spouse is the policyholder of an employment-related health plan and also is covered by a spouse's health plan. Double coverage was sensitive to the costs of insurance and the employment circumstances of working spouses, especially the employer's contribution to coverage. Households with double coverage had richer insurance benefits than other two-worker households. Also, attitudes toward risk and health status affected demand for double coverage. The likelihood of double coverage increased when either spouse was in fair or poor health and declined for those couples characterized as risk takers. Reprints (AHCPR Publication No. 99-R072) are available from AHCPR.**

Wyrwich, K.W., Nienaber, N.A., Tierney, W.M., and Wolinsky, F.D. (1999). "Linking clinical relevance and statistical significance in evaluating intra-individual changes in health-related quality of life." (AHCPR grant HS07763). *Medical Care* 37(5), pp. 469-478.

Numerous health-related quality-of-life instruments have emerged during the past two decades. These research instruments permit the

cross-sectional comparison of groups and the longitudinal monitoring of groups or individuals. This article focuses on the SEM (standard error of measurement), a theoretically fixed test characteristic within a population. It shows that the SEM may be a viable link between the issues of clinically relevant and statistically meaningful intra-individual change on health-related quality-of-life (HRQL) measures. The researchers conducted a secondary analysis of data from a randomized controlled trial involving 605 outpatients with a history of cardiac problems attending the general medicine clinics of a major academic medical center. Baseline and followup interviews included a modified version of the Chronic Heart Failure Questionnaire (CHQ) and the SF-36. One-SEM changes in this population corresponded well to the patient-driven MCID (minimum clinically important difference) standards on all CHQ dimensions. The distributions of outpatients who improved, remained stable, or declined were generally consistent between CHQ dimensions and SF-36 subscales. The researchers caution, however, that the use of the SEM to evaluate individual patient change should be explored among other HRQL instruments with established standards for clinically relevant differences.

Zhou, X-H, Catelluccio, P., Hui, S.L., and Rodenberg, C.A. (1999). "Comparing two prevalence rates in a two-phase design study." (AHCPR grant HS08559). *Statistics in Medicine* 18, pp. 1171-1182.

An epidemiological study often uses a two-phase design to estimate the prevalence rate of a mental disease. In a two-phase design study, the first phase assesses a large sample with an inexpensive screening test. The second phase selects a subsample for a more expensive diagnostic evaluation. Disease status may not be ascertained for all subjects who are selected for disease verification because some subjects are unable to be clinically assessed, while others may refuse. Since not all screened subjects are selected for diagnostic assessments, there is a potential for verification bias. In this paper, the authors propose the maximum likelihood and bootstrap methods to correct for verification bias for estimating and comparing the prevalence rates under the missing-at-random (MAR) assumption for the verification mechanism. They also propose a method to test this MAR assumption. Finally, they apply these methods to a large-scale prevalence study of dementia disorders. ■



Welcome! You are connected to the **National Guideline Clearinghouse™ (NGC)**, a public resource for evidence-based clinical practice guidelines. NGC is sponsored by the [Agency for Health Care Policy and Research](#) in partnership with the [American Medical Association](#) and the [American Association of Health Plans](#). Click on [About NGC](#) to learn more about us.

Start your search by typing keywords into the search box on this page, or click on a [Browse NGC](#) link or on [Detailed Search](#).

A [Non-Frames/Text Only](#) version of the site is also available.

Search NGC:

Submit

[Search Help](#)

[Detailed Search](#)

Browse NGC:

[Disease/Condition](#)
[Treatment/Intervention](#)
[Organization](#)

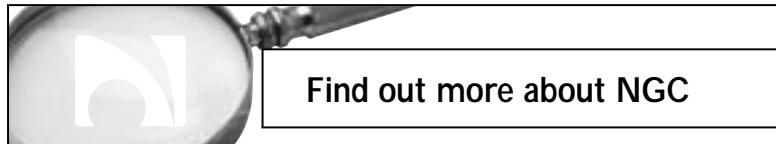
NGC News:

*Over 430 guidelines in NGC
--see the [NGC Guideline Index for a complete list](#)

Compare Guidelines:

[Guidelines Collection](#)
[Guideline Syntheses](#)

*[NGC Guideline Synthesis topic: Childhood Immunizations](#)



[About NGC](#) [NGC Resources](#) [Help](#) [What's New](#) [Contact NGC](#) [Site Map](#)
[Home](#) [Non-Frames/Text only Site](#)

National Guideline Clearinghouse Disclaimer
™ 1999 *National Guideline Clearinghouse*

Bookmark Our Site!

www.guideline.gov

The National Guideline Clearinghouse™ (NGC) was developed by AHCPR in partnership with the American Medical Association and the American Association of Health Plans. The NGC™ is a comprehensive, dynamic electronic database that contains hundreds of clinical practice guidelines and related materials published by public- and private-sector organizations. The NGC™ is constantly being updated with new guidelines.

For more information on the National Guideline Clearinghouse™ project, including information on how to submit guidelines, contact Jean Slutsky, AHCPR's NGC™ project officer, at 301-594-4042 or by e-mail to jslutsky@ahcpr.gov.



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
- News & Announcements
- Funding Opportunities
- Research Findings
- Quality Assessment
- Clinical Information
- Consumer Health
- Data MEPS HCUP
- Information Products

[Overview, strategic plan, organization & key contacts, National Advisory Council](#)

[Virtual newsroom, press releases, budget, speeches, job vacancies, general announcements](#)

[Grant announcements, notices, research training assistance, research agenda](#)

[Research Activities, children's & women's health, primary care, managed & long-term care, User Liaison Program](#)

[Quality measurement, CONQUEST, Consumer Assessment of Health Plans \(CAHPS\)](#)

[Evidence-based practice, clinical practice guidelines, preventive services, technology assessment, outcomes](#)

[Healthfinder, specific health conditions, surgery, prescriptions, health plans, health guides](#)

[Medical Expenditure Panel Survey, Healthcare Cost & Utilization Project, HIV Cost & Use, informatics standards](#)

[Availability & ordering, Government Information Locator Service \(GILS\), Web links, FOIA electronic reading room](#)

Search

Browse

Child Health

Department of Health & Human Services


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 99-0048
September 1999