Agency for Healthcare Research and Quality
Advancing Excellence in Health Care

RESEARCH ACTIVITIES

U.S. Department of Health and Human Services | No. 383, July 2012

Experts seek better diagnosis and treatment for women's urinary incontinence and chronic pelvic pain

Urinary incontinence and chronic pelvic pain can cause women to not only miss work and social events, but also avoid intimacy. Women may feel embarrassed, ashamed, and afraid. Many women suffer in silence before finding courage to seek treatment.

Now women and their clinicians can get help in their medical decisions from two reports by the Agency for Healthcare Research and Quality (AHRQ). These comparative effectiveness reviews, based on the latest evidence, compare the effectiveness of diagnostic and treatment approaches to these nonreproductive conditions that disproportionally affect women.

A physician discusses treatment options with a patient.

Although both conditions are common in women, urinary incontinence is an easily understood condition that is relatively simple to diagnose and has multiple treatment options. In contrast, chronic pelvic pain or CPP can be tough to treat.

Research Activities spoke with researchers and clinicians about the scope of each problem, the research, and opportunities for new research.

Urinary Incontinence—New Hope

"Urinary incontinence is an age-old problem. We want women to know that they don't have to have their grandmother's experience," says Beth Collins Sharp, Ph.D., R.N., senior advisor for women's health and gender research at AHRQ.

Especially since it's not only grandmothers who experience urinary incontinence. The AHRQ review found that about 25 percent of young women, 44 to 57 percent of middle-aged and post-menopausal women, and 75 percent of older women in nursing homes

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Highlights

From the Director

It wasn't long ago that women's health was primarily concerned with reproductive issues and our understanding and treatment of women's conditions came from research on men—their anatomy and drug interactions.

In the 21st century, far more research is being done to identify which groups of patients—including women—will benefit from which kind of treatment. AHRQ's Effective Health Care Program is taking a lead role in the field of patient-centered outcomes research to help providers and patients figure out which drug, medical device, test, or surgery is best for an individual.

This year, the Program posted comparative effectiveness reviews on two topics that overwhelmingly affect women and that are the kind of problems most of us wouldn't wish upon anyone—urinary incontinence and chronic pelvic pain.

In the case of urinary incontinence, the research confirmed what will be good news for thousands of women: In many cases, pelvic floor muscle training can help a woman improve her symptoms or, better yet, become continent. For chronic pelvic pain, we outlined research gaps to help support future research into diagnosis of the problem and comparisons of treatment options.

As with most of our Effective Health Care Program's comparative effectiveness reviews, we shared the results through research summaries with scales of evidence for clinicians. Companion consumer guides are written in plain language—whether that language is English or Spanish. Patients with urinary incontinence can review charts with pictures that clearly compare how different treatments work. Summaries for both conditions include questions that women can ask their providers. This will be particularly helpful for women with chronic pelvic pain, because diagnosing the cause can be a laborious process involving many providers.

Topics for future patient-centered outcomes research for women include women and heart disease and menopause symptoms and treatments. We hope our findings help women find the best treatments for their conditions. If the research helps men, too, that's all the better.

Carolyn Clancy, M.D.

Research Activities is a digest of research findings that have been produced with support from the Agency for Healthcare Research and Quality. *Research Activities* is published by AHRQ's Office of Communications and Knowledge Transfer. 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 Healthcare Research and Quality, the Public Health Service, or the Department of Health and Human Services. For further information, contact:

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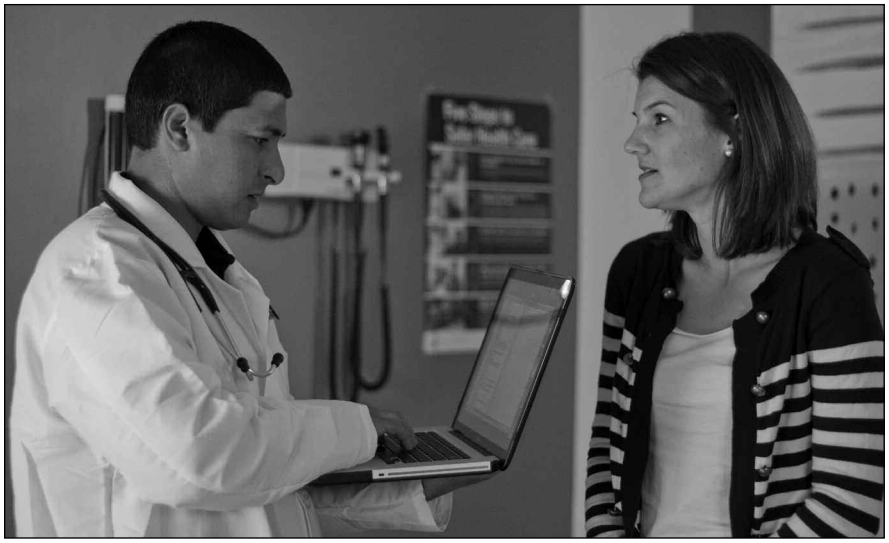

A physician discusses possible diagnoses with a patient.

Urinary incontinence and pelvic pain

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experience some involuntary urine loss. Being older is certainly a risk factor, but so are pregnancy, childbirth, menopause, hysterectomy, and obesity.

Not only is urinary incontinence common, it's costly. "About 19.5 billion dollars are spent on incontinence care each year," says Tatyana Shamliyan, M.D., M.S. "The issue is important to women and to society." Shamliyan and Jean F. Wyman, Ph.D., A.P.R.N., were part of an independent team of investigators at the Minnesota Evidence-based Practice Center who analyzed 889 studies to prepare the comparative effectiveness review *Nonsurgical Treatments for Urinary Incontinence in Adult Women: Diagnosis and Comparative Effectiveness*.

Wyman has worked in the field of incontinence since the early 1980s. She says, "Back then, there wasn't a lot of evidence around diagnostic approaches. There also weren't as many treatments."

The AHRQ review compared pelvic floor muscle training (Kegel exercises); bladder training; medical devices, including vaginal cones and inserts; weight loss; electrical stimulation; percutaneous tibial nerve stimulation; medications; and more. "We looked at interventions that perhaps could be used in the primary care setting," explains Wyman. "This report was unique in that we tried to compare the benefits of drugs as well as non-pharmacological treatments, and we looked at the harms of treatments."

Comparing drugs was especially important, since television advertisements promote medications. "People are much more aware that urinary incontinence is a problem, and they're more willing to go for help," says Wyman, who stresses that when women do get help: "It can change their whole life."

"Our report provides insights for women and clinicians who want to know which methods are the best," says Shamliyan. "We found that pelvic floor muscle training combined with bladder training is effective for treating women with urinary incontinence without risk of side effects. The drugs for urgency incontinence showed similar effectiveness. However, with some drugs, more women discontinued treatment due to bothersome side effects."

There's still much more to study. "We need more research for women who are obese," says Shamliyan. "Only one of the six drugs used to treat urinary incontinence was tested on an obese population."

In addition to suggestions for future research, Shamliyan shared her personal view with *Research Activities* on the importance of pelvic floor exercises for young women and even girls to prevent future urinary incontinence. She says, "That could have a large impact on society."

Chronic Pelvic Pain—Challenges

"Chronic pelvic pain is a good example of a health issue that is a huge challenge to clinicians, researchers, and women. It's high prevalence, high burden. But it's also difficult to box into a workable definition and diagnosis, so the treatment decisions are not always obvious," says Collins Sharp.

"The problem is very common. About 1 in 10 outpatient gynecologist appointments, up to 40 percent of laparoscopies, and up to 12 percent of hysterectomies are for chronic pelvic pain," says Jeff Andrews, M.D., of the Vanderbilt Evidence-based Practice Center, which prepared the review *Noncyclic Chronic Pelvic Pain Therapies for Women: Comparative Effectiveness* for AHRQ. "We spend over a billion dollars just on outpatient management of chronic pelvic pain."

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Urinary incontinence and pelvic pain

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Not only is chronic pelvic pain common and costly, it's also confusing. "As a patient if you have chronic pelvic pain, you're not always sure who to see—a gastroenterologist, urologist, gynecologist, or someone else. If you only see one provider, you may not get a complete assessment," says Andrews. "And a general gynecologist who has hysterectomy in his toolbox may recommend a hysterectomy and miss the real cause of the pain."

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Given women's suffering and sometimes radical treatments like hysterectomy for chronic pelvic pain, it's not surprising that a nomination from the public on comparing the effectiveness of nonsurgical treatments versus surgery for chronic pelvic pain prompted the AHRQ review focused on noncyclical chronic pelvic pain lasting 3 or more months.

"The review was complicated by the fact that chronic pelvic pain is a symptom. It's hard to isolate an etiology," says Nila Sathe, M.A., M.L.I.S., program manager at the Vanderbilt Center. "The causes can be many—irritable bowel syndrome, painful bladder syndrome, endometriosis, adhesions. Some research identified 60 potential diseases associated with chronic pelvic pain."

The research team at Vanderbilt University tackled questions about the comparative effectiveness of treatments for noncyclic chronic pelvic pain. From an initial literature search of 1,868 nonduplicate citations, the team winnowed down the list of relevant articles to 601. Most were eliminated primarily due to research that was not original, had an ineligible study size, or was lacking in quality. "There was surprisingly little literature devoted to noncyclic chronic pelvic pain," says Sathe.

"The review provides an analytic approach for evaluating symptoms in consideration of potential etiologies and provides insights on current medical and surgical strategies," says Shilpa Amin, M.D., AHRQ medical officer who managed the review process: "But it also highlights evidence gaps at present and provides considerations for researchers to think about to answer the most pertinent questions about noncyclic chronic pelvic pain evaluation and management."

Just as the report raised questions for future research, it also honed in on the importance of patients and providers asking poignant questions. As Amin explains, "Ultimately, it is an individualized process. The patient and the provider have a course of navigation to find out which clinical pathway to pursue."

To help clinicians and patients find that pathway, AHRQ posts and prints research summaries of all its comparative effective reviews. Summaries for clinicians include strength of evidence tables while summaries for consumers in English and Spanish include specific questions for patients to ask their providers.

Amanda Cofer Yuker, D.O., estimates that 80 percent of her patients come in with chronic pelvic pain. The gynecology specialist and team member on the review says, "Number one, it's important for women to get a proper diagnosis, but we need more validating tools."

"Both urinary incontinence and chronic pelvic pain are highly personal issues that can be difficult to discuss with anyone," says Collins Sharp. "By sharing the latest research with patients and clinicians, we can help women become more comfortable and explore what options are best for them." ■ *KM*

Editor's Note: AHRQ's comparative effectiveness research helps clinicians and patients find the best available treatments for individual patients. To learn more about this research through comparative effectiveness reviews, including the two discussed in this article, webinars, and continuing education opportunities, visit the Effective Health Care Program at www.effectivehealthcare.ahrq.gov.

Note: Only items marked with a single (*) asterisk are available from the AHRQ Clearinghouse. 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.

High-volume hospitals have low rates of adverse events for high-risk surgeries

Several surgical procedures, such as heart and gastric bypass surgeries and abdominal aortic aneurysm repair, have lower mortality and better outcomes if they are performed at hospitals that conduct a high volume of such procedures. Do these hospitals also have lower rates of surgical adverse events for these procedures as well? A new study suggests the answer is "yes." It found that high-volume hospitals had significantly lower rates of adverse events compared to low-volume hospitals.

Researchers collected data from the Nationwide Inpatient Sample discharge database from 2005 through 2008. Patients undergoing one of the three procedures were categorized according to their type of hospital: high-, mid-, or low-volume. A set of patient safety indicators (PSIs), established by the Agency for Healthcare Research and Quality (AHRQ), were used to determine the occurrence of surgical adverse events.

Patients undergoing surgery for abdominal aneurysm at high-volume hospitals had lower rates for a number of PSIs compared to patients at low-volume hospitals. These included lower rates of sepsis, blood clots, and bloodstream infections. In similar fashion, patients undergoing heart bypass surgery at high-volume hospitals experienced lower rates of in-hospital death, bloodstream infections, postoperative hemorrhage, postoperative respiratory failure, and other adverse events. Patients undergoing gastric bypass surgery at high-volume hospitals had lower rates on all PSIs except for sepsis, for which mid-volume hospitals had lower rates. Overall, low-volume hospitals had four times more gastric bypass adverse events compared to high-volume hospitals. The study was supported in part by AHRQ (HS18558).

See "Relationship between patient safety and hospital surgical volume," by Tina Hernandez-Boussard, Ph.D., M.P.H., John R. Downey, M.D., M.P.H., Kathryn McDonald, M.S., and John M. Morton, M.D., M.P.H., in the April 2012 *Health Services Research* 47(2), pp. 756-769. ■ *KB*

Complications and in-hospital deaths more frequent among patients who undergo anterior rather than posterior spine fusion

Patients who undergo posterior spine fusion (PSF) surgery (approached from the person's back) are less likely to develop complications or die while in the hospital than those who undergo either anterior spine fusion (ASF)—in which surgeons approach the spine from the person's front, or anterior/posterior spine fusion (APSF)—in which the surgeons use both approaches, a new study finds. Even though APSF and ASF were performed in generally younger (44.8 and 44.2 vs. 52.1 years) and healthier patients than PSF, the procedure-related complications were lowest in patients who underwent PSF (15.7 percent) than those who underwent ASF and APSF (18.7 percent and 23.8 percent, respectively).

In addition, in-hospital mortality rates after ASF and APSF were nearly double that for PSF (0.51 percent and 0.44 percent, respectively vs. 0.26 percent). The researchers identified a number of risk factors for in-hospital mortality that need to be confirmed for use in counseling patients about the three types of spinal fusion. They note that the choice of approach is often dictated by the person's pathology and infrequently represents an equivalent choice.

Their findings were based on annual data from the National Inpatient Sample of the Hospital Cost and Utilization Project of the Agency for Healthcare Research and Quality (AHRQ) for 1998 through 2006 for 261,356 patients who underwent spine fusion surgery not involving the neck

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Spine fusion
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vertebrae (noncervical spine fusion). Information was gathered on patient demographics, characteristics of the hospital, and the prevalence of comorbidities and procedure-related complications. The study was funded in part by AHRQ (HS16075) to the Center for Education and Research on Therapeutics (CERT) at the Weill Medical College of Cornell University. For more information on the CERTs program, visit www.certs.hhs.gov.

More details are in "Perioperative morbidity and mortality after anterior, posterior, and anterior/posterior spine fusion surgery," by Stavros G. Memtsoudis, M.D., Ph.D., Vassilios I. Vougioukas, M.D., Ph.D., Yan Ma, Ph.D., and others in the October 2011 *Spine* 36(22), pp. 1867-1877. ■ *DIL*

Adjusting hospital admissions by day can help with overcrowding in children's hospitals

Depending on the day of the week, children's hospitals can experience high or low occupancy levels. Both extremes can affect the quality of health care delivered to children, whose hospital stays are often 2 to 3 days long. A recent study looked at the differences in weekday and weekend inpatient occupancy rates at children's hospitals to see if the practice of "smoothing" could help with overcrowding. Smoothing is when a hospital proactively controls admissions to achieve more even census levels over days of the week. The researchers collected daily inpatient census data for 1 year from 39 children's hospitals located in 23 States.

Among the 39 hospitals, occupancy rates varied from 70.9 percent to 108.1 percent during weekdays and 65.7 percent to 94.9 percent on weekends. Overall, only 12.4 percent of scheduled admissions came in during weekends.

A hypothetical smoothing algorithm was applied to each week's census to achieve a more even distribution of patients admitted to each hospital. Had the hospitals smoothed their census over days of each week, they would have been able to prevent occupancy rates reaching higher than 95 percent.

In order to achieve effective smoothing during the week, the researchers found that a median 2.6 percent of hospital admissions would have to be scheduled on different days. This amounts to 7.4 patients needing rescheduling each week—or just under one-tenth of scheduled admissions. The study was supported in part by the Agency for Healthcare Research and Quality (HS16418).

See "Addressing inpatient crowding by smoothing occupancy at children's hospitals," by Evan S. Fieldston, M.D., M.B.A., M.S.H.P., Matthew Hall, Ph.D., Samir S. Shah, M.D., M.S.C.E., and others in the October 2011 *Journal of Hospital Medicine* 6(8), pp. 462-468. ■ *KB*

Market Forces

Perceived reputation and other factors influence consumers' hospital choices

Satisfaction with a prior hospital admission has a large impact on future hospital choice, according to a new study. While clinical quality scores are now widely available for consumers to use when choosing a hospital, these scores actually have a small influence on the decision. Instead, it appears that perceptions related to a hospital's reputation and medical services are what counts.

Employees and their spouses at a large self-insured employer were surveyed twice by telephone a year apart. Participants were asked to rate on a scale of 1 to 10 (1 being least satisfied and 10 most satisfied) each of six hospital attributes that would influence them when choosing a hospital for a future overnight stay. These attributes were the following: overall reputation, specialty medical services offered, amenities, out-of-pocket costs, quality ratings, and if

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the hospital was included in their health plan's network.

The respondents perceived differences in reputation, medical services, and out-of-pocket expenses among the hospitals. However, this was not the case with amenities. Medical services and reputation had large impacts on a future hospital choice. Consumers tended to gravitate toward hospitals with better clinical quality scores even before this information became publically available. However, clinical quality scores contributed little to hospital choice compared with a hospital's reputation and medical services. Satisfaction with a prior hospital experience had a significant and positive effect on selecting a future hospital. The researchers suggest that innovative strategies are needed to point consumers to published comparative quality data on hospitals.

The study was supported in part by the Agency for Healthcare Research and Quality (HS13680).

See "Where would you go for your next hospitalization?," by Kyoungrae Jung, Ph.D., Roger Feldman, Ph.D., and Dennis Scanlon, Ph.D., in the *Journal of Health Economics* 30, pp. 832-841, 2011. ■ *KB*

Market competition has only marginal effect on hospital performance for heart failure

Wide variations exist in the care and treatment of patients hospitalized for heart failure. As a way to improve care quality outcomes, The Joint Commission requires hospitals to submit data on their performance for the treatment of these patients. This information is reported publicly, making market competition a potential driver for better care. However, a new study found only a marginal effect of market competition on hospital performance for treating heart failure.

The researchers obtained heart failure performance data from The Joint Commission's Web site called Quality Check. Quality indicators used for the study were published from 2003 to 2006 and consisted of heart failure drugs used, left ventricular function assessment, smoking-cessation counseling, and hospital discharge instructions.

Average hospital-level performance over time improved significantly on all of the heart failure quality indicators. Overall, hospitals in the least competitive markets performed slightly better (2.9 percent) than those in the most competitive markets for left ventricular function assessment. Among hospital referral regions, the least competitive markets performed about 5.1 percent worse for smoking-cessation counseling compared to the most competitive markets. The researchers suggest several reasons why market competition did not have a stronger influence on the heart failure quality indicators. First, hospitals may be engaging more in competitive pricing and other non-price avenues. Second, patients may not be using The Joint Commission public data enough to guide their health care decisionmaking. Finally, hospitals across all markets increased their compliance with the heart failure indicators over time. The study was supported in part by the Agency for Healthcare Research and Quality (HS17944).

See "Effect of market competition on hospital performance for heart failure," by Jared Lane K. Maeda, Ph.D., M.P.H., and Anthony T. Lo Sasso, Ph.D., in the December 2011 *American Journal of Managed Care* 17(12), pp. 816-822. ■ *KB*

Many surgeons do not discuss advance directives with their patients before surgery

Surgeons try to do everything to achieve successful outcomes after surgery. Yet, some operations remain high-risk for patient mortality and require life-sustaining care afterwards. Given this thinking, some surgeons may be reticent to discuss advance directives with patients prior to surgery. In fact, a new study finds that such discussions are not routine among surgeons. What's more, some surgeons are not willing to operate on a patient if advance directives will limit postoperative care.

Researchers sent a survey to 2,100 surgeons selected at random. Their subspecialties were vascular surgery, neurosurgery, and cardiothoracic surgery. All were likely to perform high-risk operations on patients with numerous coexisting conditions. The survey asked the surgeons about their beliefs in advance directives, how they communicate with patients about them, and the limitations of life-supporting care. A total of 912 questionnaires were completed.

Nearly all of the surgeons said they discussed with patients the possibility of unanticipated outcomes and need for postoperative life-supporting therapy prior to surgery. However, about half (52 percent) of surgeons discussed advance directives before surgery. In addition, 54 percent admitted that they would not operate on a patient if the advance directives interfered or limited life-supporting therapy.

Cardiothoracic surgeons were more likely to decline to operate compared to the other specialists. The researchers suggest that patient preferences be clarified prior to surgery, since advance directives are not specifically designed for high-risk procedures. The study was supported in part by the Agency for Healthcare Research and Quality (HS189960).

See "Use of advance directives for high-risk operations: A national survey of surgeons," by Andrew J. Redmann, B.A., B.S., Karen J. Brasel, M.D., M.P.H., Caleb G. Alexander, M.D., M.S., and Margaret L. Schwarze, M.D., M.P.H., in the March 2012 *Annals of Surgery* 255(3), pp. 418-423. ■ *KB*

Large vessel occlusion after a mini stroke predicts functional decline

Sometimes called a "mini stroke," a transient ischemic attack (TIA) can be a sign of an imminent stroke within 3 months following its occurrence. A blockage in the brain's large artery, known as an intracranial large vessel occlusion (LVO), is responsible for a large number of strokes. A recent study that explored the frequency of intracranial LVO in patients with TIAs found that 13 percent of patients with TIA had an intracranial LVO and attendant declines in functional status.

Those participating in this study were patients suspected of acute stroke or TIA who arrived at two urban academic medical centers within 24 hours of symptom onset. All patients underwent CT imaging and angiograms to determine if they had a stroke or a TIA.

A total of 97 patients were diagnosed with a TIA. Of these, 13 had symptomatic intracranial LVO. This LVO was an independent predictor of decline in functional status. The LVO was also a significant predictor of poor outcome, even after adjusting for age and gender. The study was supported in part by the Agency for Healthcare Research and Quality (HS11392).

See "Intracranial large vessel occlusion as a predictor of decline in functional status after transient ischemic attack," by Sharon N. Poisson, M.D., Mai N. Nguyen-Huynh, M.D., M.A.S., S. Claiborne Johnston, M.D., Ph.D., and others in *Stroke* 42, pp. 44-47, 2011. ■ *KB*

Tumor necrosis factor-antagonists in patients with autoimmune diseases showed no overall increased risk of hospitalizations for serious infections than non-biologic drugs

Tumor necrosis factor (TNF)-antagonists are a class of biologic drugs used to treat patients with a variety of autoimmune diseases, such as rheumatoid arthritis, inflammatory bowel disease (IBD), and psoriasis. Although these biologics are highly effective, concerns exist over their potential to cause serious infections in patients taking them, since these drugs depress the immune system. Given this concern, some clinicians prefer non-biologic drugs as alternatives. However, a new study that compared both groups of drugs found no higher risk of hospitalization for serious infections with use of TNF-antagonists than with conventional drugs.

Working with institutions across the United States, the researchers identified groups of patients with the above-cited three diseases (psoriasis patients were combined in one group with psoriatic arthritis and ankylosing spondylitis patients). Information was obtained on the types of medications the patients used and the number of serious infections requiring hospitalization.

A total of 1,172 serious infections were identified. More than half of these (53 percent) were pneumonia, skin, and soft-tissue infections. No significant difference in the hospitalization rate for serious infections was observed between the TNF-antagonist group and the non-biologic agent group. This result was consistent across all autoimmune diseases studied. Within each disease group, however, there were some differences.

For example, in patients with rheumatoid arthritis, the use of infliximab was significantly associated with a higher risk of serious infections compared with other TNF-antagonists and non-biologic medications. In the case of patients with rheumatoid arthritis, psoriasis, and spondyloarthropathies, there was a significant dose-dependent increase in the risk of serious infections needing hospitalization with the use of glucocorticoids. The study was supported in part by the Agency for Healthcare Research and Quality (HS17919).

See "Initiation of tumor necrosis factor- antagonists and the risk of hospitalization for infection in patients with autoimmune diseases," by Carlos G. Grijalva, M.D., M.P.H., Lang Chen, Ph.D., Elizabeth Delzell, Sc.D., and others in the December 7, 2011 *Journal of the American Medical Association* 306(21), pp. 2331-2339. ■ *KB*

Costly, ineffective tests used more often than more effective, but inexpensive tests to diagnose peripheral neuropathy

Peripheral neuropathy is a common disorder, generally caused by diabetes, which can cause distal extremity numbness, tingling, and pain. A new study found that the evaluation of neuropathy in routine practice represents an important opportunity to improve the efficiency and effectiveness of care. The population of the study was 1,031 Medicare-age patients evaluated for peripheral neuropathy from the 1997–2007 Health and Retirement Study's Medicare claims-linked database.

The researchers found frequent use of high-cost, low-yield magnetic resonance imaging (MRI) and infrequent use of low-cost, high-yield glucose-tolerance tests that indicate diabetes. In this study, 23 percent of the patients underwent at least one MRI during the diagnostic period for neuropathy, even though this procedure is primarily useful for identifying problems in the central nervous system, not peripheral nerves. The glucose-tolerance test was performed in only 1 percent of patients.

The researchers also found that patterns of diagnostic test use in neuoropathy were highly variable. Focusing on 15 relevant diagnostic tests, more than 400 different combinations of testing were found. No single pattern of test ordering occurred in more than 4.8 percent of the patients, and no particular test was common to all of the most frequently used patterns.

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American Academy of Neurology found evidence for the effective use of only four tests: fasting glucose levels, vitamin B12 levels, serum protein electrophoresis (SPEP), and 2-hour oral glucose-tolerance tests. These tests detect neuropathy related to diabetes or treatable vitamin B12 deficiency. Both abnormal glucose-tolerance test and SPEP findings are known to be substantially more common among patients with neuropathy than among control groups. In this study, fewer than half of patients with neuropathy received 1 or more of these 4 tests, and only 17.3% received 2 or more.

Patients with neuropathy had mean Medicare expenditures nearly twice that of control patients during the diagnostic period. This study was supported in part by the Agency for Healthcare Research and Quality (HS17690).

More details are in "Tests and expenditures in the initial evaluation of peripheral neuropathy," by Brian Callahan, M.D., Ryan McCammon, A.B., Kevin Kerber, M.D., and others in the January 23, 2012 *Archives of Internal Medicine* 172(2), pp. 127-132, 2012. ■ *DIL*

Depressed patients with anxiety who fail initial antidepressant therapy may benefit from adding a second drug

Among patients who start treatment for depression, 40 percent will not respond to first-line therapy. One factor contributing to treatment resistance may be the presence of symptom clusters, such as anxiety, insomnia, fatigue, or atypical features of depression. Other researchers have found that anxiety, insomnia, and loss of energy are the symptom clusters most likely to influence the selection of an antidepressant for a patient.

The current study examined the likelihood of remission or response among patients with and without symptom clusters whose second-line therapies included augmentation with another medication or a switch in medications. The investigators found that patients' remission and response rates to alternative second-line strategies—switching therapies or augmenting therapy with a second agent—did not differ for patients with coexisting atypical symptoms or insomnia.

Patients with coexisting anxiety symptoms showed the greatest difference in remission or relapse favoring augmentation over switching, but the differences were not statistically significant. Patients with low energy were twice as likely to remit when they were augmented with extended-release bupropion compared to buspirone. If therapies were switched in depressed patients with low energy, sertraline was significantly more effective than venlafaxine.

The findings were based on applying propensity scoring, a statistical technique, to analysis of data obtained from the Sequenced Treatment Alternatives to Relieve Depression (STAR*D) trial. This large clinical trial compared the effectiveness of switching and augmenting therapy strategies after failure with the antidepressant citalopram. Three symptom clusters (anxiety, insomnia, and loss of energy) were each present in more than 50 percent of participants in STAR*D. The study was supported in part by the Agency for Healthcare Research and Quality (Contract No. 290-2005-0041).

See "Does the presence of accompanying symptom clusters differentiate the comparative effectiveness of second-line medication strategies for treating depression?" by Bradley N. Gaynes, M.D., M.P.H., Joel F. Farley, Ph.D., Stacie B. Dusetzina, Ph.D., and others, in the November 2011 *Depression and Anxiety* 28(11), pp. 989-998. ■ *KB*

"Tough guy" mentality prevents some men from seeking help for depression

Although great strides have been made in the public's awareness of depression, there is a lingering stigma about the disease. Depressed men are particularly reluctant to seek help due to gender norms that depict men as tough and autonomous.

Researchers recently explored how "toughness" in both men and women contributes to a delay in getting professional treatment for depression. They found men who perceived themselves as being tough preferred a wait-and-see approach to a diagnosis of depression. The gender norm of toughness also negatively affected how women seek out treatment, although to a lesser degree.

A total of 1,051 men and women were contacted via telephone following their participation in the California Behavioral Risk Factor Surveillance System Survey. In the follow-up call, participants were asked about their level of toughness, any current symptoms of depression, and the types of treatment they would prefer if diagnosed with depression.

Overall, 11 percent of respondents said they would prefer to wait and see what happens without seeking treatment if they received a depression diagnosis. Compared to women, men scored higher on toughness and were more likely to wait and see if symptoms resolved on their own. However, this toughness trait was associated with a greater preference to wait it out for both men and women. The researchers suggest that public education campaigns portray seeking help as an act of toughness and as an aggressive act of taking control of one's life. Such reframing of messages may help both depressed men and women get the help they need. The study was supported in part by the Agency for Healthcare Research and Quality (T32 HS00044).

See "Role of the gender-linked norm of toughness in the decision to engage in treatment for depression," by Ryan E. O'Loughlin, Ph.D., Paul R. Duberstein, Ph.D., Peter J. Veazie, Ph.D., and others in *Psychiatric Services* 62(7), pp. 740-746, 2011. ■ *KB*

Black male prisoners in North Carolina have considerably lower mortality rates than black residents of that State

A study comparing mortality rates between North Carolina State prisoners and residents has found that black prisoners have lower mortality rates than black residents for accidents, homicides, cardiovascular diseases, and cancer. The number of deaths among black male prisoners was 48 percent less than expected. White prisoners, by contrast, had higher mortality rates for several chronic causes of death but lower rates for accidents. Overall, the death rate among white male prisoners was not significantly different than that of white male residents.

Despite the lower age-adjusted mortality rates among black prisoners compared to black residents, the researchers emphasize that their study did not capture the many possible negative consequences of imprisonment such as loss of employment opportunities and broken relationships.

The researchers suggest several ways in which imprisonment may protect against or contribute to mortality. The relatively rigid provision of food, shelter, security, and medical and ancillary services may all affect mortality in prison. Similar mortality rates across races may be related to similar exposures to prison resources and environmental elements.

Previous research suggests that the mortality rate of released white prisoners was about twice that of other whites in the community, while the mortality rate among released black prisoners was similar to other black residents. Also, some previous studies suggest that some chronic conditions may be less prevalent among black than white prisoners, and also less than those of blacks in the general population. In the general population, both in the United States and in North Carolina, mortality is approximately 40 percent greater among the black than the white population.

The United States has the highest incarceration rate in the world, with an estimated 1 in 100 adults behind

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Black male prisoners

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bars on any given day. A consequence of this mass incarceration is that prisons have become an important source of health care for a portion of America's poor. The study included 120,959 North Carolina prisoners between the ages of 20 and 79 during the period 1995–2005. The study was supported in part by the Agency for Healthcare Research and Quality (HS19442).

See "All-cause and cause-specific mortality among black and white North Carolina state prisoners, 1995-2005," by David L. Rosen, M.D., Ph.D., David A. Wohl, M.D., and Victor J. Schoenbach, Ph.D., in the *Annals of Epidemiology* 21, pp. 719-726, 2011. ■ *MWS*

Women's Health

Women in jail are at increased risk of cervical cancer

Women in jail or who are under community supervision (such as parole or probation) by the criminal justice system have an increased frequency of abnormal Pap tests and other risk factors for cervical cancer, according to a new study. The researchers used data from cross-sectional self-administered surveys of women in five local jails in a midsized southeastern city and women in community corrections programs in another southern State. More than two-fifths of the 380 women surveyed (43 percent) reported that they had at least one abnormal Pap test during their life.

The women also had a high prevalence of other cervical cancer risk factors. Women who used barrier protection inconsistently during sex were twice as likely to have had an abnormal Pap test than those who used such protections consistently. Women with a history of gynecologic infections were 68 percent more likely and those with a history of sexually transmitted diseases were 92 percent more likely to have had an abnormal Pap test.

Based on their findings, the researchers suggest that women in criminal justice settings might benefit from improved cervical cancer screening, prevention with vaccination against human papillomavirus (a known cause of cervical cancer), and risk-reduction education. This study was funded in part by the Agency for Healthcare Research and Quality (HS19464).

More details are in "Risk factors for cervical cancer in criminal justice settings," by Ingrid A. Binswanger, M.D., M.P.H., Shane Mueller, M.S.W., C. Brendan Clark, Ph.D., and others in the December 2011 *Journal of Women's Health* 20(12), pp. 1839-1845. ■ *DIL*

Child/Adolescent Health

Study looks at impact of FDA suicide risk advisory on antidepressant prescribing in children

In October 2003, the Food and Drug Administration (FDA) issued an advisory warning health care providers about a potential increased risk of suicide for children taking antidepressants. In a new study, researchers examined the trends in prescribing antidepressants before and after the FDA released its advisory. It found that children's visits for depression and visits with an antidepressant prescribed declined after the advisory. However, children with major depressive disorder appeared no less likely to be prescribed antidepressants.

Annual data was obtained from two national surveys that focus on ambulatory care in physician practices, outpatient departments, and hospital emergency departments. Between 1998 and 2007, the researchers identified visits made by children aged 5 to 17 years for diagnoses of depression. Visits were also categorized into antidepressant visits where a drug was prescribed and visits where one was not prescribed.

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Antidepressant prescribing

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Prior to the FDA advisory release, there was a steady increase in the number of children's depression visits from 3.2 million in 1998–1999 to 4.3 million in 2002–2003. A similar trend was found for antidepressant visits, increasing from 3.4 million to 7.6 million. Following the advisory, children's depression visits shrank back to 3.2 million in 2006–2007. Antidepressant visits also dropped to 6.7 million.

Combined depression/antidepressant visits also increased before the advisory and then declined by 2006–2007. However, these rates stabilized to 65 percent during 2004–2005 and to 64 percent in 2006-2007. The study was supported in part by the Agency for Healthcare Research and Quality (HS19024).

See "National trends in prescribing antidepressants before and after an FDA advisory on suicidality risk in youths," by Shih-Yin Chen, Ph.D., and Sengwee Toh, Sc.D., in *Psychiatric Services* 62(7), pp. 727-733, 2011. ■ *KB*

Implementing a clinical practice guideline helps children with pneumonia get proper antibiotics

About 2 percent of children will contract community-acquired pneumonia (CAP) each year. National guidelines recommend ampicillin (a narrow-spectrum antibiotic) to treat children hospitalized with uncomplicated CAP. This antibiotic targets the bacteria *Streptococcus pneumonia*, which causes most cases of pediatric CAP.

The researchers examined the impact of a large children's hospital's implementation of a clinical practice guideline that encouraged the use of ampicillin followed by the narrow-spectrum antibiotic amoxicillin at the time of hospital discharge for 5 to 7 days. Implementing the new guideline resulted in an increased use of ampicillin and a decline in use of broad-spectrum antibiotics (that target many types of bacteria) at hospital discharge.

The researchers collected data on 530 children hospitalized with CAP for 12 months prior to guideline implementation and on 503 children after the guideline was put into place. Prior to guideline implementation, 72 percent of children were treated with ceftriaxone; only 13 percent were treated with ampicillin. After 1 year of guideline implementation, the most commonly used antibiotic was ampicillin (63 percent). Overall, there was a 34 percent increase in the use of ampicillin following guideline implementation. Importantly, no increase in treatment failures or readmissions were observed due to this change.

The use of post-discharge antibiotics also changed, with a significant rise in the use of amoxicillin and a significant decrease in the use of cefdinir and other antibiotics. Although the guideline significantly improved antibiotic choice among providers, other recommendations such as the length of antibiotic therapy and obtaining blood cultures were not followed. The study was supported in part by the Agency for Healthcare Research and Quality (HS10399).

See "Impact of a guideline on management of children hospitalized with community-acquired pneumonia," by Ross E. Newman, D.O., Erin B. Hedican, M.P.H., Joshua C. Herigon, M.P.H., and others in the March 2012 *Pediatrics* 129(3), pp. e597-e604. ■ *KB*

Study identifies signals that may predict infant neurological impairment

Doctors use electronic fetal monitoring (EFM) when a woman is in labor to detect problems and prevent injury to the baby. However, because EFM tracks fetal heart rate (FHR) patterns and not neurological activity, its usefulness may be limited in preventing a birth-related neurological disability, such as cerebral palsy. A new study that examined FHR patterns finds that three other signals, when combined with routine EFM showing nonreassuring FHR patterns, may help predict whether a baby will be born with severe neurological damage.

Researchers compared 36 malpractice cases in which infants were born with birth-related neurological

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Infant neurological impairment

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injuries after exhibiting certain FHR patterns, such as very rapid or very slow heart rates, with medical records of infants who also had these FHR patterns during labor but were born with no neurological problems. They found that 25 percent of the mothers whose babies were born with neurological injuries experienced vaginal bleeding before childbirth compared with only 1 percent of the mothers in the control group.

In fact, the odds of giving birth to a baby with neurological impairment were 27 times greater for women who experienced vaginal bleeding in the antenatal period and then had non-reassuring FHR patterns during labor than for women who had nonreassuring FHR patterns alone. The authors suggest that vaginal bleeding may indicate an abnormal placenta that could reduce the baby's oxygen supply during a stressful childbirth and result in neurological injury.

Half of the women whose babies were born with neurological injuries had an unusually long latent phase or delayed dilation during the first stage of labor compared with 25 percent of the control group's mothers. In fact, the odds of neurological injury to the baby were four times as great for the women experiencing longer first-stage labor and nonreassuring FHR patterns than for women who did not face prolonged first-stage labor in addition to their nonreassuring FHR patterns.

Finally, the odds were also four times as great that a baby would suffer neurological impairment when the fetal monitor showed minimal heart rate variation along with nonreassuring FHR patterns during the first stage of labor than when the routine EFM showed nonreassuring FHR patterns alone.

The authors recommend future research to assess whether aggressive intervention could prevent neurological injury to infants when these signals are present. This study was funded in part by the Agency for Healthcare Research and Quality (HS11886).

See "Using malpractice claims to identify risk factors for neurological impairment among infants following non-reassuring fetal heart rate patterns during labour," by Aaron S. Kesselheim, M.D., M.P.H., Martin T. November, M.D., M.B.A., Karen L. Lifford, M.D., Sc.D., and others in the *Journal of Evaluation in Clinical Practice* 16(3), pp. 476-483, 2010. ■ *KB*

Having a usual source of care promotes preventive health counseling for children

Preventive health counseling (PHC) is an important health care service for children. Recommended PHC topics include eating healthy foods and getting exercise; using seat belts, safety car seats, and bicycle helmets; and preventing exposure to second-hand smoke. Having a usual source of care (USC) is equally or more important than health insurance when it comes to receiving PHC, concludes a new study. Yet, nearly 10 percent of children do not have a USC and the percentage is higher among the uninsured.

The researchers analyzed data from 2002 through 2006 from the Medical Expenditure Panel Survey-Household Component (MEPS-HC) of the Agency for Healthcare Research and Quality (AHRQ). As part of 5 interviews during a 2-year period, parents were asked if they had ever received guidance from a health care provider on the health and safety topics listed above for their child. The survey also provided a rich source of socio-demographic characteristics, USC types, and insurance coverage details.

More than three-quarters of children (76.8 percent) had both a USC and continuous health insurance coverage in a given year. Another 14 percent had a USC but were uninsured. Five percent of children had insurance but no USC; 4.2 percent had neither continuous insurance nor a USC. The children with both health insurance and a USC had the lowest rates of missed PHC. Children without insurance and without a USC had the highest missed rates. However, children with insurance and no USC were more likely to have never received PHC on the five topics than uninsured children with a USC. According to the researchers, expanding health insurance is not enough to ensure optimal PHC for children. More efforts are needed to expand primary care resources, increase delivery of this needed counseling, and find a USC for every child. The study was supported in part by AHRQ (HS16181 and HS18596).

See "Is health insurance enough? A usual source of care may be more important to ensure a child receives preventive health counseling," by Jennifer E. DeVoe, M.D., Carrie J. Tillotson, M.P.H., Lorraine S. Wallace, Ph.D., and others in the *Maternal and Child Health Journal* 16, pp. 306-315, 2012. ■ *KB*

Study results argue against decisions about screening colonoscopy based on age alone

The likely value of screening colonoscopy (SC) depends not just on the age and sex of the patient, but also on the number of coexisting conditions, or comorbidities, that a person has, according to a new study. Initial guidelines for cancer screening, including SC to detect early-stage colorectal cancer (CRC), did not recommend an upper age limit for screening. In 2008 the United States Preventive Services Task Force recommended against routine SC in patients 76–85 years old, and against any screening for CRC in patients older than 85. The Task Force based its recommendations on diminishing benefit of SC with increasing age.

The new study found that taking into account the number of comorbidities affected whether a patient was likely to benefit from SC, even after accounting for age. For both men and women aged 85–94 with no comorbidities, SC is estimated to save around 100 life-years per 100,000 patients screened (65 life-years for men, 111 life-years for women). However, for men and women with at least 3 comorbidities, there were no life-years saved for patients older than 74.

The researchers used the National Cancer Institute's Surveillance, Epidemiology, and End Results database cross-referenced with the Medicare database to identify nearly 70,000 fee-for-service Medicare beneficiaries with CRC. They compared this sample with a subset of over 225,000 persons without cancer who met the same age and administrative criteria as the cancer patients to estimate the benefits and harms of SC by age, sex, and number of comorbidities. This study was funded in part by the Agency for Healthcare Research and Quality (HS17624).

More details are in "Assessing the impact of screening colonoscopy on mortality in the Medicare population," by Cary P. Gross, M.D., Pamela R. Soulos, M.P.H., Joseph S. Ross, M.D., M.H.S., and others in the December 2011 *Journal of General Internal Medicine* 26(12), pp. 1441-1449. ■ *DIL*

Key treatments for high blood pressure and high blood lipids do not reduce elderly patients' risk of limited mobility

Use of angiotensin-converting enzyme (ACE) inhibitors and statins do not reduce the risk of impaired mobility in older adults, a new study finds. Impairments in mobility are common in older adults, with 15 percent of older men and 23 percent of older women unable to walk two to three blocks. Chronic inflammation, which can lead to several health problems and age-related muscle loss, has been identified as a factor leading to a decline in functional status, including mobility. Both ACE inhibitors and statins—drugs used to treat high blood pressure and high cholesterol/lipid levels, respectively—may decrease systemic inflammation. In addition, ACE inhibitors may have a direct effect on muscle mass.

To see if these medications would indirectly have a positive impact on mobility, the researchers followed 3,055 healthy older adults, who had no mobility problems at baseline, for 6.5 years. At baseline, the participants were in their 70s and had no difficulty walking a quarter-mile, climbing 10 steps, or performing basic activities of daily living; 15.2 percent used ACE inhibitors and 12.9 percent used statins. By Year 6, ACE inhibitor use had increased to 25.6 percent and statin use to 28.6 percent.

At the end of the 6.5-year study, 49.8 percent of the remaining adults had developed mobility limitation. In separate multivariable models, neither ACE inhibitor use nor statin use was significantly associated with lower risk of mobility limitation. The study was funded in part by the Agency for Healthcare Research and Quality (HS17695, HS18721, and HS19461).

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Impaired mobility

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More details are in "Angiotensin-converting enzyme inhibitor and statin use and incident mobility limitation in community-dwelling older adults: The Health, Aging and Body Composition Study," by Shelly L. Gray, Pharm.D., M.S., Robert M. Boudreau, Ph.D., Anne B. Newman, M.D., M.P.H., and others in the December 2011 *Journal of the American Geriatrics Society* 59(12), pp. 2226-2232. ■ *DIL*

Study identifies demographic and clinical factors related to fractures among older Americans

Most fracture incidence studies have focused on hip fractures among white women. A new study examined fractures at the hip and five other anatomical sites and included more population subgroups than prior studies. It found that blacks had the lowest fracture rates for all sites except the ankle and tibia/fibula. Asian, African, and Hispanic Americans all had lower fracture rates than white Americans for all fracture sites. Hip and spine fracture rates were highest in the South, with other fracture rates being highest in the Northeast, according to a team of researchers from the University of Alabama at Birmingham.

Women experienced more fractures of each type than men, and older persons more fractures than those who were younger. For each type of fracture, there was an inverse association with median household income. During the 6-year period of the study, hip fracture was the only type of fracture to decrease and spine fracture the only type of fracture to increase.

Fall-related conditions and depressive illnesses were associated with each type of fracture; conditions treated with glucocorticoids were weakly associated with each type of fracture and more strongly with spine fractures; and diabetes was associated with ankle and humerus fractures. The study was based on claims data for 1.7 million Medicare beneficiaries from 2000 to 2005.

The researchers recommend that targeted interventions addressing the risk of specific fractures be developed for Americans of lower socioeconomic status, those residing in the Southern United States, those with depression, diabetes, renal disease, cancer, and conditions for which glucocorticoids are prescribed, as well as those who have sustained previous fractures. This study was supported in part by the Agency for Healthcare Research and Quality (HS16956).

See "Clinical and demographic factors associated with fractures among older Americans" by Allison J. Taylor, Ph.D., Lisa C. Gary, Ph.D., Tarun Arora, M.S., and others in *Osteoporosis International* 22, pp. 1263-1274, 2011. ■ *MWS*

Health Care Costs and Financing

Rise in prescription copays puts different patients at risk for nonadherence to medications

As employers and insurance companies look to cut costs, consumers must face rising copays for prescription drugs. As a result, some individuals may start rationing their medications and either taking them less frequently or in smaller doses than recommended (nonadherence). Evaluation of copayment increase impacts commonly focus on average effects across a population, but a new study reveals that the effects of greater cost-sharing differs across patient subpopulations. Among veterans with diabetes or hypertension, those with lower comorbidity burden were more responsive to a $5 medication copayment increase than veterans with higher comorbidity burden (greater number of medical problems).

The researchers compared medication adherence among veterans with hypertension or diabetes at four

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Copays for prescription drugs

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Veterans Affairs (VA) medical centers after a rise in the copay for prescription drugs from $2 to $7 in 2002. Medication adherence among veterans required to pay copayments were compared to veterans exempt from drug copayment. There were propensity-score matched copaying and non-copaying groups for patients with hypertension (3,545 copay, 3,545 exempt) and for diabetes (1,069 copay, 1,069 exempt).

The results found that the pooled adherence change was largely driven by the two-thirds of the sample that had below average comorbidity burden. Medication adherence among diabetic veterans with low comorbidity burden was lower after the VA increased medication copayments (9.5% lower in the first 12 months after copayment increase and 4.9% in the subsequent 11 months thereafter). In hypertensive patients, veterans with low comorbidity burden were 3.7% less adherent to medications in the 13-23 months after copayment increases. Medication adherence rates did not change for diabetic and hypertensive veterans with high comorbidity burden.

These results suggest that presenting population-average effects may lead to incorrect policy inferences about the effectiveness of copayment increases on medication adherence. Due to heterogeneity in response to cost-sharing, a one-size-fits-all approach may not align patient and health system goals as effectively as intended. High-risk patients incur greater out-of-pocket costs from continued adherence, while low-risk patients put themselves at increased risk for adverse health events due to nonadherence induced by policy changes. The study was supported in part by the Agency for Healthcare Research and Quality (HS19479).

See "Does medication adherence following a copayment increase differ by disease burden?" by Virginia Wang, Ph.D., Chuan-Fen Liu, Ph.D., Christopher L. Bryson, M.D., M.S., and others in the December 2011 *Health Services Research* 46(6,pt1), pp. 1963-1985. ■ *KB*

Health Information Technology

Electronic health records can help detect diagnostic errors in primary care

Diagnostic errors in primary care are harmful, but difficult to detect. A new study suggests that using certain types of queries ("triggers") of electronic health records (EHRs) can help identify potential diagnostic errors in primary care settings. Data from outpatient malpractice claims has consistently ranked missed, delayed, and wrong diagnoses as the most common identified errors. However, searching for diagnostic errors by existing methods (such as random chart reviews, voluntary reporting, or claims file reviews) has been found to be inefficient, biased, or unreliable.

In this study, the researchers applied queries to 212,615 outpatient visits to identify primary care visits that might contain a diagnostic error. Their main criteria was based on whether a patient had an unplanned hospitalization within 14 days (Trigger 1) or had at least one unscheduled visit within 14 days (Trigger 2) of the original primary care visit. Diagnostic errors were found by physician reviewers of the patient's chart in 141 of 674 Trigger 1 records (positive predictive value or PPV of 20.9 percent) and in 36 of 669 Trigger 2 records (PPV of 5.4 percent). The PPV of 2.1 percent for a random sample of control visits was significantly lower than those for both Trigger 1 and 2.

The researchers suggest that the accuracy of the EHR diagnostic triggers was sufficiently better than existing methodologies that can be used to identify and analyze diagnostic error. The findings were based on EHR data on primary care outpatient visits from a large Veterans Affairs facility and a large private, integrated health care system. This study was funded in part by the Agency for Healthcare Research and Quality (HS17244).

More details are in "Electronic health record-based surveillance of diagnostic errors in primary care," by Hardeep Singh, M.D., Traber Davis Giardina, M.A., M.S.W., Samuel N. Forjuoh, M.B., Ch.B, Dr.P.H., M.P.H., and others in the *British Medical Journal of Quality and Safety* 21(2), pp. 93-100, 2012. ■ *DIL*

Primary care practices can boost clinical preventive services with electronic health records and quality improvement support

Small medical practices that upgrade their electronic health record (EHR) systems to include modules for clinical decision support and practice-level quality improvement substantially boost their delivery of a number of clinical preventive services (CPS), a new study finds. Despite strong evidence that providing CPS reduces morbidity and mortality, provision of CPS has not increased in adult primary care. The researchers studied 56 primary care practices in New York City. Overall, the patient population was 59 percent women, and 55 percent of the patients were age 45 years or older. The most common diagnoses were high blood pressure (hypertension), high blood lipids (dyslipidemia), and diabetes.

Across all practices, 7 of 10 CPS measures increased following upgrade of the EHR software. Those measures that increased significantly were blood-glucose screening (from 46 to 62 percent), recording of body-mass index (from 66 to 78 percent), blood-pressure control (from 50 to 55 percent), aspirin therapy to reduce heart attack risk (from 46 to 53 percent), recording smoking status (from 77 to 84 percent), breast cancer screening (from 28 to 32 percent), and influenza vaccination (from 20 to 24 percent). Only smoking-cessation intervention and blood-glucose control measures showed negligible-to-small decreases (a decline of less than 1 percentage point in each case). This study was funded in part by the Agency for Healthcare Research and Quality (HS17059).

More details are in "Health information systems in small practices: Improving the delivery of clinical preventive services," by Sarah C. Shih, M.P.H., Colleen M. McCullough, B.A., Jason J. Wang, Ph.D., and others in the December 2011 *American Journal of Preventive Medicine* 41(6); pp. 603-609. ■ *DIL*

Although the patient-centered medical home is a promising model of care, more studies are needed to assess its effectiveness

Although the patient-centered medical home (PCMH) is a promising model of care, rigorous evaluations and analysis are needed to assess its effectiveness and refine the model to meet stakeholders' needs, concludes a review of studies on the topic. Most (93 percent) health care consumers want to have a single place or doctor to provide primary care and coordinate with any specialists. However, only half report having such an experience, according to recent surveys. Decisionmakers are aware of consumers' interest, but need to consider whether the evidence supports investing in restructuring care to the PCMH model to achieve better quality, improved experience, and lower cost of care.

Researchers at the Agency for Healthcare Research and Quality (AHRQ), Janice L. Genevro, Ph.D., Michael L. Parchman, M.D., and David S. Meyers, M.D., along with colleagues from Mathematic Policy Research, conducted the literature review of 498 studies published or disseminated from January 2000 to September 2010. Of these, 14 evaluations of 12 interventions were judged to be rigorous. The interventions most often cited to support the medical home were viewed as precursors to the medical home. Evaluation of six of these interventions provided rigorous evidence on at least one of the three outcome areas: quality, cost and service use, and experience of care.

Overall, the evidence on the PCMH provides some favorable effects on all of the outcomes of interest and a few unfavorable effects on costs. Yet, most results were inconclusive. Further, most of the existing interventions targeted older, sicker populations, who showed more favorable effects that did general populations. The study was funded by the Agency for Healthcare Research and Quality (Contract No. 290-09-000191).

More details are in "Early evaluations of the medical home: Building on a promising start," by Deborah Peikes, Ph.D., Aparajita Zutshi, Ph.D., Janice L. Genevro, Ph.D., and others in the February 2012 *American Journal of Managed Care* 18(2), pp. 105-116. Reprints (Publication No. 12-R032) are available from AHRQ.* ■ *DIL*

Hard-of-hearing individuals more likely to report difficulties in accessing care

Hearing loss is prevalent in older adults and is the sixth most common chronic condition in the United States. A survey of 6,524 older adults has found that those who were hard-of-hearing were more likely to report difficulties in accessing health care. Thirteen percent of hard-of-hearing individuals reported experiencing difficulties and delays in health care access in the past year compared to 8 percent of those not hard-of-hearing. However, satisfaction with access to care was similar for both groups.

Hard-of-hearing individuals were proportionately more likely to have diabetes mellitus, atherosclerotic vascular disease, clinically significant depressive symptoms, and slightly lower self-rated health. They were also more likely to be male, separated/divorced, and to have Medicare insurance than private or Medicaid insurance.

The adults surveyed between 2003 and 2006 were all graduates of Wisconsin high schools in 1957. Eighteen percent among this group were hard-of-hearing. With the aging population, this group is likely to grow, caution the researchers. They recommend that resources be made available to proactively address the access to care issues for those who are hard-of-hearing and to educate providers about the specific needs of this population. Their study was supported in part by the Agency for Healthcare Research and Quality (HS15700).

See "Hearing loss and older adults' perceptions of access to care" by Nancy Pandhi, Jessica R. Schumacher, Steven Barnett, and Maureen A. Smith in the *Journal of Community Health* 36, pp. 748-755, 2011. ■ *MWS*

Tool assesses the readiness of black churches to engage in health disparities research

A new development in health disparities research is the creation of partnerships between academic centers and churches, particularly churches serving the black community. Determining if they are ready to engage in such research efforts is important. A recent study outlines the use of an instrument designed to assess church readiness. The evaluated churches showed high levels of being prepared to engage in this research. Also, readiness was linked to the pastor's activities and sermon topics.

The instrument consists of two one-page scenarios detailing possible health promotion research projects involving weight management and nutrition interventions. These scenarios are followed by 15 items designed to determine how ready the church is to conduct the intervention and then assess it. For example, questions address finding leaders to conduct sessions, locations for sessions, and conducting pre- and post-tests. The researchers tested the instrument at 15 black churches in North Carolina.

Overall, the readiness level of the churches was high. Pastoral leadership and having funds set aside for health-related activities promoted readiness. Churches that had pastors who preached on nutrition or other health topics had higher readiness levels compared to churches with pastors who did not do this. Churches with high readiness levels also had budgeted funds designed for health promotion, screenings, etc. The researchers note that the instrument can be used by churches to measure their readiness progress and to engage churches in a discussion on health disparities research. The study was supported in part by the Agency for Healthcare Research and Quality (T32 HS00032).

See "Assessing the readiness of black churches to engage in health disparities research," by Molly De Marco, Ph.D., M.P.H., Bryan Weiner, M.A., Ph.D., Shelly-Ann Meade, M.S., and others in the September/October 2011 *Journal of the National Medical Association* 103(9 & 10), pp. 960-967. ■ *KB*

Study projects savings by Affordable Care Act to individual health insurance policyholders

People with private individual health insurance would likely save $280 a year in out-of-pocket spending for medical care, including prescription drugs, under the Affordable Care Act (ACA), according to an AHRQ study published May 16 online by the journal *Health Affairs*. ACA would decrease out-of-pocket spending by $589 for people ages 55 to 64 and by $535 for low-income adults. The study also estimates that under ACA, the percentage of individually insured adults whose out-of-pocket spending exceeds $6,000 a year would fall from 2.6 percent to 0.6 percent. The study projected an individual's likely annual savings from 2001 to 2008, based on data from AHRQ's nationally representative Medical Expenditure Panel Survey, which collects data on how Americans use and pay for health care. About 11 million nonelderly Americans had private individual health insurance in 2009. ■

Web videonovela series helps Spanish-speaking patients compare treatments for diabetes

A new Spanish-language videonovela, *Aprende a vivir (Learn to Live)*, features messages to help diabetes patients compare their treatment options to find a regimen that works best for them. The three-part videonovela series began being distributed via the Internet by the Agency for Healthcare Research and Quality (AHRQ) as part of a wide range of activities that celebrated National Minority Health Month in April.

Aprende a vivir tells the story of Don Felipe, who has type 2 diabetes and is head of the Jiménez family, and the problem he has learning to manage his disease. The first episode was released April 26 on AHRQ's Healthcare 411 website http://healthcare411.ahrq.gov/aprendeavivir.aspx. The following two episodes were released in early May.

The videonovela series shows how Don Felipe, with the support of his family, comes to understand that he needs to speak with his health care team about his treatment options rather than skip his medication because of side effects. Research shows that people with type 2 diabetes often have problems adhering to medication schedules. Causes may include low health literacy, poor patient-provider communication, cultural barriers, and other factors.

Data from the Centers for Disease Control and Prevention (CDC) show that in 2007–2009, after adjusting for population and age differences, nearly 12 percent of Hispanics 20 or older had been diagnosed with diabetes. AHRQ data show that in 2008, Hispanics were more than twice as likely as non-Hispanic whites to be admitted to a hospital for uncontrolled diabetes without complications, and were twice as likely to be hospitalized for long-term complications from uncontrolled diabetes.

"Closing gaps in health care disparities among Hispanics and other Americans is a priority for AHRQ, and *Aprende a vivir* will contribute to this effort," said AHRQ Director Carolyn M. Clancy, M.D. "The videonovela series provides a compelling platform for bringing to life some of the important everyday issues central to effective patient care."

The Healthcare 411 Web site will showcase not only the *Aprende a vivir* series, but also links to patient education resources on comparing treatments for diabetes, and selected other health information from AHRQ and across the Department of Health and Human Services. The materials are available in Spanish and English. Viewers of the *Aprende a vivir* series will also have the option of selecting captions in Spanish or English. The episodes, which vary from 5 to 7 minutes each, will also be available on AHRQ's Spanish-language Facebook page www.facebook.com/AHRQehc.espanol.

"*Aprende a vivir* is an entertaining way to model and reinforce healthy behaviors without lecturing," said Ileana Ponce-Gonzalez, M.D.,

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Web videonovela

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AHRQ's Spanish-language spokesperson. "The videonovela as an educational tool is beneficial for individual consumers, patients, clinicians, promotores de salud, educators, and advocates to improve the quality of care and patient safety of people living with diabetes."

For information in Spanish about diabetes from the CDC go to www.cdc.gov/diabetes/spanish/ and from the National Institute of Diabetes and Digestive and Kidney Diseases, go to http://diabetes.niddk.nih.gov/spanish/index_sp.aspx.

For the latest information on Hispanics' access to and quality of health care, go to AHRQ's 2011 *National Healthcare Disparities Report* at www.ahrq.gov/qual/qrdr11.htm. ■

Limited evidence prevents firm conclusions on rheumatoid arthritis drug therapies

A newly updated research review from the Effective Health Care Program of the Agency for Healthcare Research and Quality (AHRQ) reinforces the current standards of care for drug therapies used to treat rheumatoid arthritis (RA). The review concluded that there is not enough evidence to determine which individual oral disease-modifying antirheumatic drug (DMARD) or combination therapy is best. Overall tolerability is similar among oral and biologic DMARDs. However, several studies suggest that severe side effects are more common with biologic DMARDs when compared with oral DMARDs. More evidence is needed on drug combination therapies to compare the value of different combination strategies and different biologic DMARDs, timing and initiation of therapies, and applicability of therapies in clinical settings.

RA, which affects 1.3 million Americans, is an autoimmune disease that involves inflammation of the synovium (a thin layer of tissue lining a joint space) with progressive erosion of bone leading in most cases to misalignment of the joint, loss of function, and disability. Treatment of patients with RA aims to control pain and inflammation. The mean total annual direct cost to patients with RA is estimated to be $9,519 per person, with estimated indirect costs to be roughly twice as much. Patients with arthritis experience decreased quality of life, lower employment rates, and greater direct and indirect costs.

These findings can be found in the review, *Drug Therapy for Rheumatoid Arthritis in Adults: An Update*. This research review adds to AHRQ's growing library of resources for arthritis, one of AHRQ's priority topics. To access this review and other materials that explore the effectiveness and risks of treatment options for various conditions, visit the Effective Health Care Program Web site at www.effectivehealthcare.ahrq.gov. ■

AHRQ report finds teamwork and followup as strengths of medical offices but work pressure and pace are problematic

Teamwork and patient care tracking/followup are strengths for medical offices, but work pressure and pace are areas for improvement, according to new results from the AHRQ *Medical Office Survey on Patient Safety Culture*. Most (84 percent) medical office staff feel they have good teamwork among staff and providers and that the office follows up with patients appropriately (82 percent). But only 46 percent of staff rated the work pressure and pace in their office positively. The first edition of the *Medical Office Survey on Patient Safety Culture: 2012 User Comparative Database Report* provides results from 23,679 staff from 934 U.S. medical offices. The report helps medical offices compare their patient safety culture scores with other medical offices. It contains detailed comparative data on the survey by number of providers, specialty, ownership, region, and by staff position. The survey, which can be used by medical offices, health systems, and researchers to assess the opinions of medical office staff about patient safety issues and overall quality of care, can be accessed at www.ahrq.gov/qual/patientsafetyculture/mosurvindex.htm. The survey measures 10 areas of patient safety culture as well as overall ratings on quality and patient safety. ■

Consumer and clinician summaries now available on chronic pelvic pain treatment options

Two new research summaries on treatment options for noncyclic chronic pelvic pain (CPP) are now available from the Effective Health Care Program of the Agency for Healthcare Research and Quality (AHRQ). The consumer and clinician summaries are based on the research review *Noncyclic Chronic Pelvic Pain Therapies for Women: Comparative Effectiveness*. The reports conclude that, despite the extensive use of invasive surgical procedures to treat women with noncyclic chronic pelvic pain, little evidence supports a surgical approach. Additionally, current evidence is insufficient to change existing approaches to care. For this reason, less-invasive diagnostic and therapeutic interventions may be warranted before trying more invasive treatments associated with more severe side effects.

The consumer summary *Treating Chronic Pelvic Pain* describes noncyclic chronic pelvic pain and explains research on CPP therapies. The summary assists patients to determine the cause of their pain, describes available treatments and their side effects, and provides helpful questions women with CPP can ask health care professionals.

The clinician summary *Effectiveness of Treatments for Noncyclic Chronic Pelvic Pain in Adult Women* provides an overview of noncyclic CPP and delivers the clinical bottom line, including key findings, on CPP. In conjunction with the review and summaries, a new continuing medical education activity and faculty slide set have also been created. These materials and many others that explore the effectiveness and risks of treatment options for various conditions are available on AHRQ's Effective Health Care Program Web site at www.effectivehealthcare.ahrq.gov. ■

Podcast series discusses the AHRQ Quality Indicators™ Toolkit for Hospitals

AHRQ has released a series of seven audio interviews focused on the use of quality improvement tools in the AHRQ Quality Indicators™ Toolkit for Hospitals. The toolkit is a free resource to guide hospitals through the process of using the AHRQ Inpatient Quality Indicators (IQIs) and Patient Safety Indicators (PSIs) to improve care. The first interview in this series features Donna Farley, adjunct senior health policy analyst at the RAND Corporation, speaking about how hospital teams can adapt and use the toolkit to support their quality improvement initiatives. You can download the toolkit at www.ahrq.gov/qual/qitoolkit/ (audio file and transcript are available). Future podcasts will address the following topics:

- Analyzing your IQI and PSI rates
- Using the documentation and coding tool
- Identifying your improvement priorities
- Analyzing your barriers and strategy options
- Implementing changes to improve performance on the IQI or PSI measures
- Achieving sustainable improvements

To access the slide presentations and an audio recording from an introductory Web conference about the toolkit go to www.ahrq.gov/qual/qitoolkit. ■

New patient decision aid and other resources available on osteoporosis medications

A new interactive patient decision aid and other resources comparing the effectiveness of medications to prevent fractures in patients with low bone density are now available from AHRQ's Effective Health Care Program. The resources summarize research from the research review, *Treatment to Prevent Fractures in Men and Women with Low Bone Density or Osteoporosis: Update of a 2007 Report*.

For consumers, *Reducing the Risk of Bone Fracture: A Review of the Research for Adults With Low Bone*

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Osteoporosis medications

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Density, describes how low bone density can boost the risk of fracture and what research has found about different types of treatments to lower the risk. A companion interactive online patient decision aid can help patients prepare to talk with their clinician about treatment options.

For clinicians, *Treatment To Prevent Osteoporotic Fractures: An Update* provides background on osteoporosis, research findings, and the clinical bottom line for osteoporosis treatment across therapy classes. A continuing medical education activity is available for health care professionals interested in receiving education credits, and a faculty slide set is available for those who wish to share this information with clinicians, researchers, and other health professionals.

To access this review and other materials that explore the effectiveness and risks of treatment options for various conditions, visit AHRQ's Effective Health Care Program Web site at www.effectivehealthcare.ahrq.gov. ■

New clinician research summary available on adjunctive devices for acute coronary syndrome

A new clinician research summary on the comparative effectiveness, benefits, harms, and safety of adjunctive devices for acute coronary syndrome (ACS) patients undergoing percutaneous coronary interventions (PCI) is available from the Effective Healthcare Program of theAgency for Healthcare Research and Quality (AHRQ). PCI is a common procedure to open the coronary arteries in order to improve blood flow and relieve the symptoms of ACS such as chest pain and shortness of breath. Current evidence on changes in health status and unintended side effects is too limited to draw conclusions about the benefits and harms of using one type of adjunctive device over another. However, there is evidence that catheter aspiration thrombectomy reduces the occurrence of major negative cardiovascular events, distal embolization, and the "no reflow phenomenon" and improves ST-segment elevation resolution and coronary flow. In addition, evidence does not support benefits from mechanical thrombectomy or embolic protection devices, which also prolong procedure time.

This summary is accompanied by a continuing medical education activity and faculty slide set to further assist clinicians, researchers, and other health professionals in decisionmaking. This set of resources is based on the research review *Adjunctive Devices for Patients with Acute Coronary Syndrome Undergoing Percutaneous Coronary Intervention.*

To access the summary and other materials that explore the effectiveness and risks of treatment options for various conditions visit AHRQ's Effective Health Care Program Web site at www.effectivehealthcare.ahrq.gov. ■

Call for papers for special issue of *Health Services Research* on mixed methods in health care delivery system research

AHRQ and *Health Services Research* are partnering to publish a special issue on mixed methods in health care delivery systems research. This type of research is defined as research that combines and systematically integrates quantitative and qualitative methods in a single study to obtain a fuller picture and deeper understanding of a phenomenon. The aim of the special issue is to provide researchers, funders, and policymakers with a better understanding of how mixed-methods studies may contribute to health services research and to promote and facilitate the expanded use of mixed-methods designs in delivery system research. This issue will consist of reports on results from exemplary mixed-methods studies and papers that advance an understanding of principles underlying mixed-methods research or address specific methodological challenges in this type of research. Deadline to submit is October 15. You can submit papers at www.hsr.org/hsr/abouthsr/call-for-papers-special-issue.jsp. ■

Aaronson, D.S., Odisho, A.Y., and Hills, N. (2012, February). "Proton beam therapy and treatment for localized prostate cancer: If you build it, they will come." (AHRQ grant HS19356). *Archives of Internal Medicine* 172(3), pp. 280-283.
Patients with localized prostate cancer who live in a hospital referral region where a proton beam facility is available are more likely to receive proton beam therapy. However, no study has demonstrated superiority of this form of therapy to photon-based therapy in terms of either cancer or improved quality of life. Also, proton beam therapy is substantially more expensive than the other treatment.

Baddley, J.W., Winthrop, K.L., and Patkar, N.M. (2011, September). "Geographic distribution of endemic fungal infections among older persons, United States." (AHRQ grant HS18517). *Emerging Infectious Diseases* 17(9), pp. 1664-1669.
A national study using Medicare data finds that the incidence of two types of fungal infections, histoplasmosis and blastomycosis, was highest in the Midwest; the third type, coccidioidomycosis, is most prevalent in the West. Knowledge of areas of increased incidence may improve diagnostic or prevention measures in older adults at risk for endemic fungal infections.

Bailey, S.C., Hasnain-Wynia, R., and Chen, A.H. (2012). "Developing multilingual prescription instructions for patients with limited English proficiency." (AHRQ grant HS19435). *Journal of Health Care for the Poor and Underserved* 23, pp. 81-87.
The authors describe the development of a set of patient-centered prescription medication instructions and their translation into five languages. Findings from this process of improving, translating, and adapting prescription instructions can be used to better inform the development of other patient materials within the pharmacy or in other health care settings.

Basu, J. (2011). "Admissions for CABG procedure in the elderly. Was there a change in access to teaching hospitals after 1997?" *Social Work in Public Health* 26, pp. 605-620. Reprints (Publication No. 12-R037) are available from the Agency for Healthcare Research and Quality.*
This study identifies patient attributes related to admission to New York and Pennsylvania teaching hospitals for coronary artery bypass graft surgery during 1997–2001. Patient characteristics associated with a higher likelihood of admission to teaching hospitals included racial/ethnic status, transfer cases, and Medicaid and private health maintenance organization insurance. Access to teaching hospitals disproportionately declined for Medicaid patients during this period, which saw growing financial constraints for hospitals.

Brach, C., Dreyer, B., Schyve, P., and others. (2012, January). "Attributes of a health literate organization." Institute of Medicine. Discussion Paper. Washington, D.C.: National Academies Press. Reprints (Publication No. 12-R060) are available from the Agency for Healthcare Research and Quality.*
This paper describes ten attributes of a health literate organization, that is, an organization that makes it easier for people to navigate, understand, and use information and services to take care of their health. It explains which organizations should use these attributes and how they should be used. Several examples of each of the ten attributes are also given.

Clancy, C. (2011, January). "Checking in about innovation." *Healthcare Informatics* 28(2), pp. 48-64. Reprints (Publication No. 12-R056) are available from the Agency for Healthcare Research and Quality.*
The editor interviews the director of the Agency for Healthcare Research and Quality on using information technology strategically to improve care delivery, quality, patient safety, and efficiency. The topics addressed include: learning in a systematic way from off-label

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use of medications, the pace of information technology advances, patient-centered care, and physician engagement in performance measurement.

Clancy, C. (2011, February). "Focus on heart health. Learn the signs and treatments for heart disease." *AARP Bulletin*. Reprints (Publication No. 12-R039) are available from the Agency for Healthcare Research and Quality.*

The director of the Agency for Healthcare Research and Quality discusses angiotensin converting enzyme inhibitors and angiotensin II receptor blockers, medications for stable coronary heart disease, which are the subject of an AHRQ report. She also discusses how people can lower their risk of heart problems through exercise, lifestyle changes, and knowing when to consult a doctor.

Clancy, C., Glied, S.M., and Lurie, N. (2012, February). "From research to health policy impact." *HSR: Health Services Research* 47(10, Part II), pp. 337-343. Reprints (Publication No. 12-R049) are available from the Agency for Healthcare Research and Quality.*

This commentary, by authors now directly engaged in policy, describes the ways that research influences policy and offers reflections on the culture and imperatives of a policy environment. Topics discussed include: defining the contours of a problem, identifying the strengths and weaknesses of policy options, estimating the costs and consequences of legislative proposals, and the implementation of legislation.

Clancy, C. (2011, October). "How to get patients to ask—and doctors to listen." *AARP Bulletin*. Reprints (AHRQ Publication No. 12-R043) are available from the Agency for Healthcare Research and Quality.*

The director of the Agency for Healthcare Research and Quality discusses the importance of patients becoming more active in their own care by asking questions of their health care providers. She gives the example of an individual heart patient who learned the importance of becoming more active in his care.

Clancy, C. (2011, November). "How to get the best value for your health insurance plans." *AARP Bulletin*. Reprints (Publication No. 12-R044) are available from the Agency for Healthcare Research and Quality.*

The director of the Agency for Healthcare Research and Quality discusses how people in various situations can find health insurance appropriate to their needs. In particular, she discusses insurance options for the Medicare-eligible, the self-employed, the unemployed, those who have lost insurance due to job loss, and those who are uninsured because of a pre-existing condition. She also discusses the different basic types of private coverage ranging from conventional indemnity insurance to health maintenance organizations.

Clancy, C. (2012). "Let the data be our guide: Trends and tools for research on health care utilization." *Health Economics* 21, pp. 19-23. Reprints (Publication No. 12-R036) are available from the Agency for Healthcare Research and Quality.*

The director of the Agency for Healthcare Research and Quality offers examples of inefficiencies in the health care system (drug-related adverse outcomes, readmission to the hospital for the same conditions) and describes the challenges and prospects for improved efficiency. One such area is the measurement and documentation of inefficiencies. Another is the bringing together of different data collections (State data organizations, hospital associations, and private data organizations in the Healthcare Cost and Utilization Project).

Clancy, C. (2011, February). "Making the right thing the easy thing to do." *AARC Times*. Reprints (Publication No. 12-R041) are available from the Agency for Healthcare Research and Quality.*

In a keynote address to the American Association for Respiratory Care, the director of the Agency for Healthcare Research and Quality discusses various topics: patient-centered outcomes research, the Affordable Care Act, how to leverage the best evidence (e.g., the Michigan Keystone Project), and the role of respiratory therapists in improving the patient's experience.

Clancy, C. and Collins, F.S. (2010). "Patient-centered outcomes research institute: The

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intersection of science and health care." *Science and Translational Medicine* 2(37), pp. 1-3. Reprints (Publication No. 12-R045) are available from the Agency for Healthcare Research and Quality.*
The director of the Agency for Healthcare Research and Quality and the director of the National Institutes of Health discuss the Patient-Centered Outcomes Research Institute (PCORI), a nonprofit corporation created by the Affordable Care Act. They emphasize PCORI's opportunities to contribute to a robust portfolio of scientific inquiry that builds on their agencies' investment in comparative effectiveness research.

Clancy, C. (2011, September). "Protocol for all. Smaller hospitals can adopt proven tools for reducing central-line infections." *Modern Healthcare*, p. 20. Reprints (Publication No. 12-R059) are available from the Agency for Healthcare Research and Quality.*
The director of the Agency for Healthcare Research and Quality discusses the Comprehensive Unit-Based Safety Program (CUSP) to reduce central line-associated bloodstream infections. The CUSP protocol uses a checklist of evidence-based safety practices that both small and mid-sized hospitals can use. The article describes how the initial program, developed for Michigan, has spread to hospitals in all 50 States.

Clancy, C. (2011, September). "Which treatments work best for you?" *AARP Bulletin*. Reprints (AHRQ Publication No. 12-R042) are available from the Agency for Healthcare Research and Quality.*
The director of the Agency for Healthcare Research and Quality discusses consumer guides that address various areas of women's health. Topics range from drugs to reduce the risk of breast cancer for women at high risk and how to manage pain from a broken hip to osteoporosis treatments, gestational diabetes, and induced labor.

Cohen, S.B. (2011, August). "The utility of the integrated design of the Medical Expenditures Panel Survey to inform mortality related studies." AHRQ Working Paper No. 11004. Reprints (Publication No. 12-R055) are available from the Agency for Healthcare Research and Quality.*
This study enhances the capacity to conduct longitudinal analyses by augmenting the Medical Expenditure Panel-National Health Interview Survey linkages with further matches to the National Death Index to inform mortality-related studies. Attention is given to enhancing an understanding of the data linkage process and to articulating an estimation strategy to permit longitudinal analyses, as well as the development of the necessary estimation weight.

Croswell, J., and Fall, B. (2012, February). "Screening for bladder cancer." *American Family Physician* 85(4), pp. 401-402. Reprints (Publication No. 12-R054) are available from the Agency for Healthcare Research and Quality.*
The authors present a case study, complete with questions and answers, on screening for bladder cancer. It is based on the recommendations of the U.S. Preventive Services Task Force. For more information, go to the Task Force Web site at www.uspreventiveservicestaskforce.org/uspstf/uspsblad.htm.

Davis, M.M., Gross, C.P., and Clancy, C. (2012, February). "Building a bridge to somewhere better: Linking health care research and health policy." *HSR: Health Services Research* 47(1), pp. 329-336. Reprints (Publication No. 12-R058) are available from the Agency for Healthcare Research and Quality.*
The authors provide an introduction to a series of articles written by investigators connected with the Robert Wood Johnson Foundation Clinical Scholars Program. The articles address important barriers to bridging the gap between research and policy. Among the topics discussed: the practice patterns of urologists, value-based insurance design, changes in patient safety indicators from 1998 to 2009, insurance coverage and the quality of asthma care, and the screening of athletes for sickle cell trait.

Doorenbos, A.Z., Jacobsen, C., Corpuz, R., and others. (2011). "A randomized controlled calendar mail-out to increase cancer screening among urban American Indian and Alaska Native patients." (AHRQ grant HS10854). *Journal of Cancer Education* 26, pp. 549-554.
This study seeks to ascertain whether a culturally tailored art calendar could improve participation in cancer screening activities. The results suggest that printed materials with health messages are likely too weak an

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intervention to produce the desired behavioral outcomes in cancer screening.

Eapen, Z.J., Fonarow, G.C., Dai, D., and others. (2011). "Comparison of composite measure methodologies for rewarding quality of care." (AHRQ grant HS16964). *Circulation: Cardiovascular Quality and Outcomes* 4, pp. *610-618.*

The researchers conducted an observational analysis to determine the influence of the opportunity-based and all-or-none composite performance measures on hospital rankings. They examined 194,245 patients with heart attacks. They found that the two performance measures are highly correlated and yield similar ranking of the top and bottom quintiles of hospitals.

Encinosa, W., Du, D., and Bernard, D. Anti-obesity drugs and bariatric surgery. Social Science Insights into Prevention, Treatment and Policy, pp. 792-807, *The Oxford Handbook of the Social Science of Obesity* (Editor: John Cawly). London: Oxford University Press, 2011. Reprints (Publication No. 12-R058) are available from the Agency for Healthcare Research and Quality.*

The authors first describe the range of anti-obesity drugs and bariatric surgery and the research evaluating their outcomes. They conclude that bariatric surgery results in much more weight loss, reduction in comorbidities such as diabetes, and reduced mortality.

Koh, H.K., Berwick, D.M., Clancy, C., and others. (2011). "New federal policy initiatives to boost health literacy can help the nation move beyond the cycle of costly 'crisis care.'" *Health Affairs* 31(2), pp. 434-443. Reprints (Publication No. 12-R050) are available from the Agency for Healthcare Research and Quality.*

Recent federal policy initiatives such as the Department of Health and Human Services' National Action Plan to Improve Health Literacy have brought health literacy to a tipping point—that is–poised to make the transition from the margin to the mainstream. If public and private organizations make it a priority to become health literate, the nation's health literacy can be advanced to the point at which it will play a major role in improving health care and health for all Americans.

Krumholz, H.M., Curry, L.A., and Bradley, E.H. (2011). "Survival after acute myocardial infarction (SAMI) study: The design and implementation of a positive deviance study." (AHRQ grant HS16929). *American Heart Journal* 162, pp. 981-987.

Positive deviance studies combining qualitative and quantitative designs (a mixed-methods approach) can discover strategies to produce exemplary performance. The authors present the SAMI study, a national mixed-methods study to discover hospital strategies that are associated with higher survival rates for patients hospitalized with a heart attack. They also convey key principles and considerations in designing and implementing positive deviance studies.

Meltzer, D.O., Hoomans, T., Chung, J.W., and Basu, A. (2011). "Minimal modeling approaches to value of information analysis for health research." (AHRQ Contract No. 290-07-58, grant HS16067). *Medical Decision Making* 31, pp. E1-E22.

The authors develop a framework to define and classify minimal modeling approaches to value of information (VOI) techniques, review existing VOI studies that apply minimal modeling approaches, and illustrate the application of the minimal modeling to new clinical applications to which the approach appears well suited. They conclude that minimal modeling approaches can be readily applied in some instances to estimate the expected benefits of clinical research.

Meyers, D., and Clancy, C.M. (2011). " The patient-centered medical home: Putting the patient at the center of care." *Journal of Primary Care & Community Health* 2(1), pp. 2-5. Reprints (Publication No. 12-R038) are available from the Agency for Healthcare Research and Quality.*

The patient-centered medical home (PCMH) model holds great promise as a way to improve health care by reshaping how primary care is organized, delivered, and integrated with other aspects of care. The Agency for Healthcare Research and Quality has taken a leadership role in developing the PCMH as a potential model to achieve high-quality, accessible, and efficient health care. The authors describe the function and attributes of a medical home. ■

U.S. Department of Health and Human Services

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AHRQ Pub. No. 12-RA010
July 2012

ISSN 1537-0224

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