# VA Research Currents

Update from Health Services Research and Development

### Refocusing priorities to ensure maximum benefit for veterans

By Shirley Meehan, MBA, PhD, Acting Director

SR&D's years of fostering capacity-building while the Research budget grew are paying off in increasing numbers of high-quality HSR&D proposals. Based on the notifications of intent to submit, we expect to receive nearly 200 project proposals for our December review. This is a four-percent increase over the last review cycle! That is the good news. The bad news is that the fruits of our labor come at a time when budgets are very constrained.

We are working with several senior VA scientific advisory groups and individual project managers to identify potential opportunities for cost-savings.

# Toward an agenda for women's health research

Women are the fastest-growing segment of potential VA health-care users. They now make up 14 percent of the armed forces and 20 percent of new military recruits.

On Nov. 8 and 9 in Alexandria, Va., VA and non-VA experts in women's health took part in a meeting titled "Toward a VA Women's Health Research Agenda: Setting Evidence-Based Research Priorities for Improving the Health

see WOMEN on next page

We also are striving to identify sustainable capacity levels to ensure that we can continue to support important investigator-initiated research projects. We are hopeful that a combination of HSR&D and ORD efforts will help us move above the initial 14-percent funding level for projects reviewed in September. We believe we will be able finally to support approximately 17 percent. We also believe that, because of projects terminating in fiscal year 2006, we will be able to sustain at least that level in future rounds.

Given our current budget constraints, we must be especially diligent to emphasize areas of research that meet the special needs of veterans and targets areas where VHA has opportunities to make unique contributions. Accordingly, we are reevaluating our program priorities and plan to have a new umbrella solicitation for project proposals in late February that will replace most of the current HSR&D solicitations. Check the HSR&D web for the most up-to-date solicitation information: www.hsrd.research.va.gov/ for\_researchers/funding/.

With recognition of the importance and value of bringing together multidisciplinary researchers, clinicians, and policymakers to explore ways to improve health care for veterans, planning is moving ahead for the HSR&D National Meeting scheduled for Feb. 16-18, 2005. The meeting will be held in Baltimore, Md., and the theme will be "Improving Care for Veterans with Chronic Illnesses." This is a very important topic, as 29 common chronic diseases have been identified as prevalent among veterans. Among the top five are hypertension, substance abuse, and ischemic heart disease. The national meeting will include scientific workshops, papers and poster presentations, as well as the presentation of the Under Secretary's Award for Outstanding Achievement in Health Services Research. For the meeting agenda, abstracts and registration information, please visit the web at http://www.hsrd.research.va.gov/ about/national\_meeting/.

HSR&D investigators continue to contribute to the health services literature through publication of their study findings. For the most recent publications check the web at www.va.hsrd.research. Of special note, the November issue of *The American Journal of Managed Care* presents a number of articles by VA health services researchers that showcase the breadth of VA research and its applicability to non-VA settings.

On behalf of all of the HSR&D Central Office staff, best wishes for the holiday season and happy New Year!

#### WOMEN (cont. from pg. 1)

and Care of Women Veterans." The groundwork for the meeting was laid earlier this year when the Office of Research and Development formed a Women's Health Research Planning Group and tasked it with developing a comprehensive agenda. The group assessed the VA research portfolio and funding trends in this area, conducted a literature review, and identified barriers to conducting women's health research in VA.

Speakers at the November conference included Brigadier General Wilma L. Vaught, president, Women In Military Service for America Memorial Foundation; Nora Egan, VA's chief of staff; Michael J. Kussman, MD, MS, acting deputy under secretary for health; Laura Miller, MPA, CHE, deputy under secretary for health for operations and management; and Stephan D. Fihn, MD, MPH, acting chief research and development officer.

Summary presentations of background work prepared participants for deliberations in five workgroups. The groups were asked to identify gaps in current evidence; forge a consensus on research priorities; and identify what is needed to foster VA women's health research in each of the ORD services. Talks and slides from invited

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(410) 962-1800, ext. 223
researchinfo@vard.org

## A cheaper, safer alternative to Vioxx?

A study by clinicians and pharmacists at the VA North Texas Health Care System suggests that the generic anti-inflammatory drug etodolac may be a safe, effective alternative to more expensive, patented pain-killers.

The researchers found that patients taking etodolac had 60-percent fewer gastrointestinal complications that those taking naproxen, an over-the-counter pain reliever. Etodolac's safety profile in the study was equal to or better than that seen in previous research on other Cox 2 inhibitors, such as Celebrex or Vioxx. Vioxx was voluntarily recalled from the market in September by its maker, Merck, in response to a study that showed that

speakers as well as work-group summary reports are available on the Women's Health section of the ORD web site at http://www.va.gov/resdev/ programs/women\_health/default.cfm.

The Women's Health Research Planning Group is preparing a final report and recommendations to ORD based on the background work and conference outcomes. In addition, the Planning Group has established a VA Women's Health listserv to foster dialogue among those interested in women veteran's research. To join the listserv, send an email to ORD.Web@med.va.gov.

VA's commitment to women's health research is further reflected in a VA HSR&D-sponsored special issue of the *Journal of General Internal Medicine* targeting issues relevant to women's health. Papers are due to JGIM by Dec. 31, 2004. See http://www.sgim.org/JGIMCallVA.pdf for the call for submissions.

patients taking the drug for more than 18 months doubled their risk of heart attack and stroke.

The authors of the new study calculated that VA could save \$40 million dollars annually if etodolac were prescribed instead of brandname pain relievers. Based on this and other research, VA's Pharmacy

VA could save \$40 million annually by prescribing etodolac instead of brand-name pain relievers.

Benefit Management Strategic
Healthcare Group has recommended
that all VA patients formerly on Vioxx
be considered for etodolac. Michael
Valentino, RPh, the program's chief
consultant, said "This is an example of
VA's efforts to use evidence-based
medicine to improve health care for
veterans, with savings to the taxpayer."

The Dallas-based study, led by Byron Cryer, MD, evaluated more than 16,000 veterans who had taken either etodolac or naproxen over a three-year period. Those on etodolac were 60-percent less likely to experience clinical significant upper gastrointestinal events. While the study did not evaluate cardiovascular side effects, Cryer noted that in the 13 years of etodolac's use in the United States, there have been no reports associating it with increased cardiovascular risk.

Cryer and colleagues did note that patients taking low-dose aspirin along with etodolac were just as likely to suffer gastrointestinal complications as those taking naproxen.

Dec. 2004

## Magnetic pulses improve language ability in some stroke patients

eterans Affairs researchers and colleagues in Boston have shown that applying magnetic pulses to a precise spot on the brain can help improve speech ability in some stroke patients with aphasia. Aphasia is a loss of the ability to use language, resulting from damage to the language centers in the left half of the brain, due to a stroke, tumor or head injury.

#### Magnetic field affects neurons

The method, known as Transcranial Magnetic Stimulation (TMS), relies on a figure-8-shaped electromagnetic coil, about the size of a telephone receiver, that is held against the patient's scalp. As it is powered on and off, the coil generates a fluctuating magnetic field. The field penetrates the skull and creates an electric current in a halfinch square of the cortex, or surface region, of the brain. It is unknown exactly how TMS works, says lead investigator Margaret Naeser, PhD, but she and her colleagues presume that repeated treatments improve existing neural networks for language or help create new ones.

"The neurons in the affected area will depolarize, and then connect with other neurons," she said. "We believe it's affecting the whole language network."

Naeser, a linguist and speech pathologist with the VA Boston Healthcare System and professor of neurology with Boston University Medical School, has conducted neuroimaging research for 30 years. She says TMS is already in limited clinical use in Europe and the United States for depression and post-stroke paralysis, and may prove to be a valuable adjunct treatment, along with speech therapy, for aphasia. The National Institute on Deafness and

Other Communication Disorders and VA are funding her work on the topic. A key collaborator is Alvaro Pascual-Leone, MD, PhD, a TMS expert at Beth Israel Deaconess Medical Center and Harvard Medical School.

During treatments, the team uses magnetic resonance imaging (MRI) to track the positioning of the coil and make sure it is over the correct spot on the brain. Naeser's and Pascual-Leone's prior experiments have shown that even one or two centimeters off can temporarily impair language instead of helping it. They have pinpointed a small area in the right side of the brain that corresponds to the left "Broca's area," a language center named after the 19th-century French doctor who identified it. The researchers have found that only when the coil is centered over the front part of the right-hemisphere Broca's area is the desired effect achieved.

# Brain tries to compensate for damage to language sites

Earlier this year, the team published findings from a study on four stroke patients with nonfluent aphasia—a form of aphasia in which patients' speech is slow, poorly articulated and ungrammatical. The patients had suffered their strokes from 5 to 11 years earlier. They had plateaued in their language recovery and were thus no longer receiving individual speech therapy.

In nonfluent aphasia, the brain tries to compensate for damage to Broca's area and other left-hemisphere areas by forging new neural pathways for language on the right side. But the process is full of kinks and results in slow, broken speech. Naeser's team believes this may be because the

cortex in this area becomes *overactivated*, as shown in functional MRI scans. The slowly pulsating magnetic field generated with TMS calms the cortex. The researchers say this may help the neurons to abandon flawed pathways and seek out more viable ones.

## Patients in study improve scores on 'naming' test after TMS

After receiving TMS treatments for 20 minutes, five days a week, for two weeks, the patients in the study scored higher on tests in which they were shown pictures of everyday objects and asked to name them. The researchers expected the patients to show improvements only at two months post-treatment, but the gains continued through eight months. For example, one patient was able to name 4 of 20 pictures before the TMS treatments; 7 of 20 pictures at two months post-treatment; and 12 of 20 at eight months later. She was also able to name the pictures in less time after the 10 treatments.

On another test, in which the patients were shown a picture of children stealing cookies from a cookie jar and asked to describe what they saw, two of the four patients increased their longest phrase length by two words.

"For chronic aphasia patients who are 10 and 11 years post-stroke, that's really something," said Naeser.
"Usually you don't see that—they're quite stable."

She added: "Obviously we need more research, but we're very encouraged with our findings, because the patients improved significantly, and they seem to *keep* improving."

#### Career milestones

Laura Petersen, MD, MPH, of VA's Houston Center for Quality of Care and Utilization Studies and Baylor College of Medicine, received the American Heart Association's Established Investigator Award, in the amount of \$100,000 per year for five years, in support of her study titled "Are Financial Incentives Effective in Improving Cardiovascular Disease Prevention?"

Stephen G. Waxman, MD, PhD, received the National Multiple Sclerosis Society's (NMSS) first Stephen C. Reingold Award. Waxman is chair of neurology at Yale University School of Medicine and director of VA's Center for the Restoration of Function in Spinal Cord Injury and Multiple Sclerosis. Reingold retired earlier this year as vice president of research for the NMSS.

**Deborah Fisher, MD, MHS,** is the 2004 winner of the Research Excellence in GI and Liver (REGAL) Award. The award, sponsored by the University of Kansas Medical Center, was based on Fisher's publication in the April 2003 American Journal of Gastroenterology of her study titled "Mortality and Follow-Up Colonoscopy after Colorectal Cancer." Fisher is a physician-researcher at the Durham VAMC and Duke University.

Hagop S. Akiskal, MD, chief of the Mood Disorders Program at the VA San Diego Healthcare system and director of the International Mood Center at the University of California, San Diego, was elected to the French National Academy of Medicine. Akiskal's research has widened awareness of bipolar disorder and helped advance genetic studies on the condition.

Vidya Jayawardena, MD, a physician with the spinal cord injury unit at the Hunter Holmes McGuire VAMC in Richmond and assistant professor at Virginia Commonwealth University, won the 2004 Ernest Bors Award for Scientific Development from the American Paraplegia Society. The award recognized her work on evaluating the cost-effectiveness of

routine urine screening for SCI patients.

Sharon Rounds, MD, chief of pulmonary and critical care at the Providence VAMC and professor of medicine and pathology at Brown University, was elected president of the American Thoracic Society. Her research focuses on acute lung injury.

Roberto J. Groszmann, MD, chief of the digestive disease section and director of the hepatic hemodynamic laboratory at the VA Connecticut Healthcare System, received the Ismar-Boas Medal from the German Society of Digestive and Metabolic Diseases for his "continuous and outstanding contribution to unraveling the pathophysiology and advancing the treatment of portal hypertension." Portal hypertension is abnormally high blood pressure in the portal vein, which brings blood from the intestine to the liver. The condition is often associated with cirrhosis of the liver.

Next ORD field conference call: Jan. 10, 2005 • 1:30 pm EDT Dial 1-800-767-1750 (code 17323)

 Message from director of Health Services R&D

 Forging an agenda for women's health research

Magnetic treatments for post-stroke aphasia

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VA Research and Development Communications Department of Veterans Affairs 103 S. Gay St., Rm. 517 Baltimore, MD 21202