



RESEARCH QUARTERLY UPDATE

Office of Research and Development

www.research.va.gov

Spring 2014

An overview of key accomplishments and initiatives in VA research

NEW INITIATIVES



Dr. Leonard Egede is a physician-researcher at the Charleston, S.C., VA Medical Center. (Photo by Stacy Pearsall)

State of the Art Conference on the next generation of clinical performance measures

VA Research's Office of Health Services Research and Development (HSR&D) periodically conducts State of the Art Conferences (SOTAs). These conferences bring together an invited multidisciplinary group of VA and non-VA experts to synthesize what we know and what we need to know about topics critical to the health and well-being of Veterans.

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Using peer mentors to support PACT efforts to improve glucose control

The prevalence of diabetes in the U.S. is expected to rise from 14 to 21 percent by 2050. A recent VA study, conducted by VA's Center for Health Equity Research and Promotion (CHERP), based in Philadelphia and Pittsburgh, found that peer support, especially in the form of mentors, can help African American Veterans who find it difficult to control their diabetes.

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THIS ISSUE: CHRONIC DISEASE CARE

FROM THE ACTING CHIEF R&D OFFICER



Chronic diseases such as heart disease, stroke, cancer, diabetes, Parkinson's disease, and arthritis

are among the most common and costly of all health problems in the United States. And, according to the Centers for Disease Control and Prevention, they are the leading causes of death and disability in our nation. Case in point: 7 in 10 deaths in the U.S. are from chronic diseases, with heart disease, cancer, and stroke accounting for more than half of all deaths.

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U.S. Department of Veterans Affairs
Veterans Health Administration
Office of Research & Development

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VA is able to provide high-quality care to Veterans with chronic illnesses thanks to a state-of-the-art electronic health record system, a full continuum of services, and an emphasis on evidence-based medicine.

Many of the treatments clinicians now use to manage chronic conditions in patients throughout the U.S. and the world have resulted from the efforts of VA researchers. In February, for example, a group of expert researchers published new guidelines for managing high blood pressure. A VA researcher, Dr. William C. Cushman, was an expert member of the panel and coauthor of the group's report. In a recent article by Dr. Cushman, he explained the new guidelines to his fellow physicians.

Our researchers are developing new methods to look at chronic illness and how to care for Veterans who have them. Because our research program is positioned within an integrated health care system, we have unique opportunities to translate study findings into clinical practice, and to have the work done in clinical care settings inform our research agenda.

It is important to note that chronic diseases are often preventable, to a large extent, and VA researchers have made exciting progress in developing and testing new approaches to help ward off these illnesses. One example is a multisite VA trial now underway comparing two methods for colorectal cancer screening. In the "In the News" section of this newsletter, you'll read about other work by VA investigators and colleagues

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NEW INITIATIVES

State of the Art Conference on the next generation of clinical performance measures

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The conferences also promote implementation of findings that improve the quality of VA care and contribute to more effective management of the VA health care system, and more relevant research.

The 11th SOTA, the first to be held virtually, began in January 2014 and is still in progress. Entitled "Next Generation Clinical Performance Measures: Patient-Centered, Clinically Meaningful, and High Value," the conference is exploring VA's clinical performance measurement system.

VA's clinical performance management system helps the department understand its successes and challenges when it comes to providing top-notch medical care to Veterans. The process identifies gaps in care and management processes, and thereby leads to improvements.

For example, VA, like some other health systems, tracks how well providers are able to help patients achieve normal blood sugar or blood pressure levels. VA also follows whether patients are getting recommended preventive or screening procedures, such as breast and cervical cancer screenings, cholesterol screenings, and influenza immunizations.

Conference participants, including both VA and non-VA experts in performance measurement, are identifying the current state of the evidence on clinical performance measures and identifying areas that need further study. Their focus will be on areas where findings are ready for implementation.

One key goal is to make performance measures more personalized and clinically meaningful. Another is to find ways to better integrate patient preferences into the process of performance management.

Starting in January, the invitation-only SOTA held virtual work group meetings over a two-month period, with each of four work groups meeting for three 90-minute sessions. Each work group is now working on a summary of its deliberations for a plenary session to be held in May. A sub-group of the SOTA will then meet to develop additional products that may include a research agenda, manuscripts, and white papers.



NEW INITIATIVES



Veterans Glenn Williams (left) and Ronald Ross (right) are taking part in a study at the Philadelphia VA Medical Center on peer mentoring to help with diabetes management. Here, they meet with study coordinator Kirsten Rogers. (Photo by Tommy Leonardi)

Using peer mentors to support PACT efforts to improve glucose control

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CHERP researchers believe that peer mentors may be especially effective for VA patients, because the sense of camaraderie is strong in Veterans, and many patients lack other social support. The researchers also believe that peer support models may be effective in Veterans from all racial groups, not just African Americans.

Accordingly, a CHERP team, led by Judith A. Long, MD, is now recruiting patients for a randomized controlled trial of Veterans whose diabetes is poorly controlled. Some of these Veterans will be first enrolled as mentees in a program to help diabetic Veterans, and then these diabetic Veterans themselves will enroll as mentors to other diabetic Veterans.

The study will test the effectiveness of these peer mentors in a racially mixed population. It will also compare the effectiveness of peer mentoring with “usual care” on outcomes related to diabetes, including blood sugar levels, blood pressure, cholesterol levels, quality of life, and depression.



VA Research Week 2014

VA Research Week 2014 is being held May 19 – 23, 2014. The week is designed to call attention to the achievements of VA researchers

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FROM THE ACTING CHIEF R&D OFFICER

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in the area of colorectal cancer screening.

VA also continues to make changes in its delivery of care through the use of Patient Aligned Care Teams (PACTs), which encourage Veterans to work together with health care professionals to make sure they receive personalized care to meet their individual health care goals. Our goal is to continue to collaborate with the entire VHA system, with our academic partners, with other federal agencies, and with private industry to meet the challenges of helping Veterans manage their chronic diseases.

In this issue of *VA Research Quarterly Update*, we're pleased to provide you with a report on where we are in this effort, and where we are going.



Timothy J. O'Leary, MD, PhD
Acting Chief Research and
Development Officer

IN THE NEWS

VA researchers investigate a new non-invasive option for colon cancer screening.

In March 2014, a group of researchers at the Richard A. Roudebush VA Medical Center in Indianapolis and the Indiana University School of Medicine published the results of a 90-site study to evaluate a new DNA test to determine whether colon cancer is present. Among the news outlets covering the study were CBS News and *The New York Times*. The research team's evaluation of the test,

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IN THE NEWS

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which probes the DNA found in people's stool, found that the test detects significantly more cancers than the currently available stool evaluation test, called the fecal immunochemical test. However, it does so at the cost of more false-positive results. A panel from the U.S. Food and Drug Administration (FDA) reviewed the test, and on March 27, 2014, unanimously recommended its approval for use. Full FDA approval was pending as of the publication of this issue of VARQU.

March 25 was the American Diabetes Association's Alert Day for 2014. As part of an effort to inform Veterans and others about their risk for developing the disease, Timothy O'Leary, MD, PhD, of VA's Office of Research and Development, appeared on The National Defense, a syndicated radio program provided to radio stations nationwide by the Veterans of Foreign Wars. According to Dr. O'Leary, type 2 (adult onset) diabetes affects nearly 20 percent of Veterans who use VA health care, compared to about 8 percent of the general public. He also said that diabetes is the leading cause of blindness, kidney disease, and amputation in the United States, and that up to 80 percent of patients with diabetes will face a heart attack or stroke. Dr. O'Leary said that VA is finding that group therapy is proving to be a successful method to help people control their blood sugar levels; that using pedometers encourages physical activities to help keep diabetes under control; and that coaching

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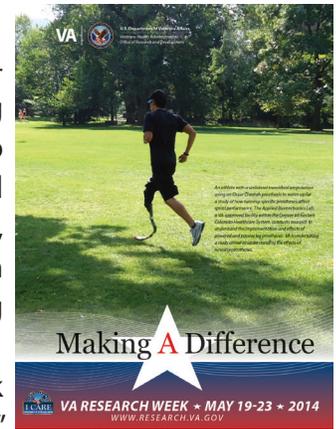
NEW INITIATIVES

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and the role they play in providing high-quality care for Veterans and in advancing medical science. It is an opportunity to educate Veterans and their families, elected representatives, community leaders, taxpayers, and others about VA research and its impact on treating and preventing disease and disability.

The theme for this year's Research Week events is "VA Research: Making a Difference."

More information and materials can be found at the Research Week website, on VA Research's Facebook page, and on our Twitter feed (@VAResearch).



A CHAT WITH OUR EXPERTS

A center devoted to chronic-disease research

VA's Center for Chronic Disease Outcomes Research (CCDOR) is one of 19 HSR&D Centers of Innovation. The center, located within the Minneapolis VA Health Care System, currently supports 62 funded projects with an annual budget of over \$8.8 million. *VA Research Quarterly Update* spoke with Steven Fu, MD, MSCE, director of the center, about its current projects, past accomplishments, and future goals.

VARQU: Tell us about the work of the Center for Chronic Diseases Outcomes Research.

Dr. Fu: Our mission is to promote patient-centered, high-value care for Veterans with chronic disease. We do that by conducting high-quality, innovative research to enhance patient engagement in evidence-based care and optimize provider use of evidence-based practices.



Dr. Steven Fu

We have about 25 core investigators. We are an interdisciplinary community of physician-researchers, clinical psychologists, and research scientists. We do a lot of research across multiple areas of chronic disease.

We have three strategic areas of focus: posttraumatic stress disorder, cancer prevention and screening, and the

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Minnesota National Guardsmen complete a ruck march at Forward Operating Base Gerber, in Kuwait, in 2012. CCDOR investigators are working with Guardsmen to identify factors associated with risk and resilience in the face of deployment. (Photo by Cpl. Trisha Betz, USA)

management of chronic pain. We also do work on other chronic conditions, including issues like osteoporosis, abdominal aortic aneurysms, reduction of cardiovascular risk, and chronic obstructive pulmonary disease. Another area of focus is health disparities research.

VARQU: What are a few of the major

accomplishments of CCDOR researchers?

Dr. Fu: Let me highlight a few noteworthy items. One is the work done by the RINGS (Readiness and Resilience in National Guard Soldiers) project team, which is headed by Dr. Melissa Polusny. This has been a big project for our center, and has been conducted in partnership with the Minnesota National Guard.

It's really one of the first studies that is able to obtain pre-deployment, in-theater, and post-deployment data to examine a number of factors related to risk and resilience, mental health problems, and subsequent mental health utilization. It will also provide information that can be useful for military retention and attrition.

A number of high-impact papers have come from the RINGS project. One of its main findings was demonstrating how, prior to deployment, the rate of probable PTSD in study subjects was about 3.5 percent. Immediately post-deployment, that increased to about 16 percent. RINGS researchers were looking at different predictors of PTSD, and found there were risk and resiliency factors present both prior to and following deployment that were associated with developing PTSD post-deployment.

For example, they found that soldiers who were less prepared for deployment before it took place, and who were more worried about the impact of deployment on their life, developed more severe PTSD symptoms. Also, soldiers who had less family and community support had more severe symptoms.

Findings such as these have been used by both the Minnesota National Guard and the RINGS project team to inform the outreach referrals and other efforts that have been made to assist the reintegration of servicemembers.

Another main accomplishment I'd like to highlight is the work of

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and counseling is an important aspect of managing the disease.

Veterans exposed to blasts from bombs, grenades, and other devices may still have brain damage even if they have no symptoms, according to a study led by researchers at VA's Mid-Atlantic Mental Illness Research Education and Clinical Center (MIRECC) in Durham, N.C., and Duke University. The results of the study, which were reported on in *U.S. News and World Report* and



Dr. Raj Morey, of the Durham VA and Duke University, led a study suggesting that exposure to blasts may damage the brain's white matter even when no symptoms emerge. (Photo by Shawn Rocco/Duke Medicine)

a number of other publications, suggested that a lack of symptoms of traumatic brain injury after a blast may not indicate the extent of brain damage caused by the blast. In the study, researchers divided 45 Iraq and Afghanistan Veterans into three groups: those who had been exposed to blasts and had symptoms of TBI; those who'd been exposed to blasts and had no TBI symptoms; and those with no blast exposure. The

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participants underwent scans to look for damage in the brain's white matter, as well as tests to assess their mental abilities. Veterans who were exposed to blasts but had no symptoms had brain damage similar to that seen in those with symptoms of TBI.

Too many small, inconsequential thyroid cancers are being treated,

suggests a study by researchers from the White River Junction VA Medical Center and Dartmouth Medical School. According to the researchers—whose findings, originally published in *JAMA Otolaryngology-Head and Neck Surgery*, were covered by *NPR, Newsday*, the *San Francisco Chronicle*, and other publications—many thyroid cancers being treated are abnormalities that would cause few problems if left untreated. The researchers found that despite a threefold increase from 1975 to 2009 in thyroid cancer, mortality rates have remained unchanged. They believe this is because many of the increased number of cases are due to the use of more sensitive equipment that can detect small, slow-growing tumors that would never cause problems. Thyroid cancer is generally divided into four types: papillary, the most common and least deadly form; follicular, the second-most common type, and more aggressive than papillary; medullary, a rare and hereditary form; and anaplastic, which is the most aggressive and deadly. The researchers found that virtually the entire threefold increase was in the papillary form, which is diagnosed in up to 85

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A CCDOR study tested a proactive outreach strategy to help Veterans quit smoking. (Photo: Getty Images)

Dr. Timothy Wilt in the area of prostate cancer. He and his team completed, a few years ago, the Prostate Cancer Intervention Versus Observation trial (PIVOT), a large, randomized, multi-site, VA cooperative study comparing radical prostatectomy versus clinical observation of prostate cancer.

This was a very significant study that demonstrated radical prostatectomy was not at all better than watchful waiting or observation. One of the impacts of the study, along with other work done with Dr. Wilt, is that eventually the PSA test was determined to be not a useful test for [routine] prostate cancer screening.

The study helped to inform how we screen for prostate cancer and when the PSA test is, or is not, appropriate.

There's also the Veterans Victory over Tobacco Study. Our team's work was just published online in *JAMA Internal Medicine*. We leveraged VA's electronic medical record to create a registry of current smokers, and we tested a proactive model of care for tobacco treatment in which we did proactive outreach.

We went directly to current smokers within VA, and offered them care, instead of waiting for them to come to see the doctor and to ask for care on their own. We tried to make it easier for them to receive telephone counseling and medications, and found that we were able to substantially increase the rates of combination treatment for tobacco, which includes both behavioral counseling and medication therapy.

As we increased the reach of evidence-based treatments, we were also able to increase the population quit rate by 2.6 percent, which is highly significant because it's from a population that included all smokers, not just smokers who were interested in attempting to quit. It's an example of how a proactive care strategy can increase the impact of treatment on a population, and it's one of the first studies to examine these population impacts.

This is relevant, not only for tobacco treatment, but also for other treatments where one wants to increase the reach of evidence-based treatments.

VARQU: What are some of the areas CCDOR investigators are working on now?

Dr. Fu: Currently, we are fortunate to have one of VA HSR&D's Col-

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A Naval Academy midshipman crawls through the mud during “Sea Trials.” One of four related CCDOR studies on PTSD, funded through VA’s Collaborative Research to Enhance and Advance Transformation and Excellence (CREATE) initiative, will focus on women Veterans. (Photo by Petty Officer James Pinsky, USN)

We have a series of four projects in our CREATE. The first project is to test a Web-based tool to promote Veteran involvement in care for PTSD, and to help family members of Veterans with PTSD to encourage their service member to engage in care.

The second project is being conducted by an investigator [Anne G. Sadler, PhD, RN] at the Iowa City VA Medical Center, and has to do with enhancing women’s care for PTSD within VA.

The third project is being led by Dr. Michele Spont in our center. She’s testing an intervention to work with VA primary care providers who work in VA community-based outpatient clinics (CBOCs). They don’t have as much access to the resources available in medical centers—but they see a lot of people with PTSD in their primary care clinics. She is developing a provider intervention to help them to prescribe and deliver evidence-based pharmacotherapy for PTSD in a primary care CBOC setting.

The last project is called PERSIST (Promoting Effective, Routine, and Sustained Information of Stress Treatment), and it’s designed to try to understand how to enhance the delivery of evidence-based psychotherapies within our PTSD specialty care clinics. Those two evidence-based psychotherapies are cognitive processing therapy and prolonged exposure therapy.

That’s the main focus right now of our current work. It’s all called evidence-based therapies for PTSD, or EBT4PTSD. It’s estimated that PTSD will become a chronic condition for about a third of Veterans who develop the disorder, but there are evidence-based treatments available for PTSD, and if we can get Veterans those treatments, we can keep PTSD from becoming chronic.

By enhancing access to and engagement with these therapies,

laborative Research to Enhance and Advance Transformation and Excellence (CREATE) projects. Directed by Dr. Nina Sayer, CCDOR’s associate director, our CREATE is focused on PTSD, and its goal is to improve outcomes for Veterans with PTSD through enhanced delivery and uptake of evidence-based treatments. We’re really trying to enhance Veterans’ engagement in treatments for PTSD.

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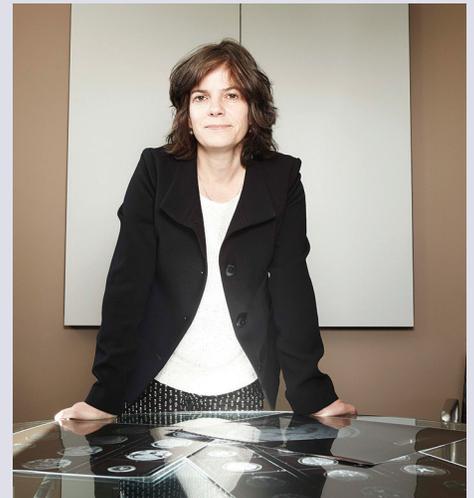
IN THE NEWS

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percent of patients, and has long-term survival rates of more than 90 percent.

Young adults with cardiac risk factors such as high blood pressure and elevated glucose levels have significantly worse cognitive function in middle age.

These findings, from a study by researchers from the San Francisco VA Medical Center, UCSF and other sites, bolster the view that diseases like Alzheimer’s develop over an individual’s lifespan and may be set in motion early in life. They also offer hope that through diet, exercise, and medication, young adults can lower their risk of developing



Dr. Kristine Yaffe’s team at the San Francisco VA found that cardiac risk factors among young adults may set the stage for poor cognitive function later in life. (Photo by Cody Pickens)

dementia later in life. The study examined data from more than 3,300 18- to 30-year-olds enrolled in the Coronary Risk Development in Young Adults (CARDIA) study. Cardiac risk factors were measured every two to five years for 25 years, at which point those in the study

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underwent tests to measure their executive function, cognitive processing speed, and verbal memory. Those whose blood pressure and glucose exceeded recommended levels during the 25-year study performed worse on all three tests, while high cholesterol was associated only with poor verbal memory. Lead author Kristine Yaffe, MD, chief of geriatric psychiatry and director of the Memory Disorders Clinic at the San Francisco VA, and a professor at UCSF, was quoted as saying: "We already know that reducing these risk factors in midlife can decrease the risk of dementia in old age. If it turns out that the damage begins before middle age, we may need to expand our focus and work on reducing heart disease risks in earlier stages of life." A report about the study appeared in the *San Francisco Examiner*. 

HONORABLE MENTIONS

Four VA Researchers Win PECASE awards—In December, the White House named the recipients of the Presidential Early Career Awards for Scientists and Engineers (PECASE). Four VA researchers were among the awardees. All 102 award winners received the awards in a ceremony in Washington, DC, on April 14, which included a meeting with President Obama at the White House.

The award is the highest honor bestowed by the federal government on science and engineering professionals in the early stages of their independent research

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we're hoping to help Veterans to live with PTSD and to prevent it from becoming a chronic condition. With effective therapy, PTSD can be managed, and the disabilities associated with PTSD can be reduced.

VARQU: What does the future hold for CCDOR?

Dr. Fu: I'd like to talk about two areas: the first is lung cancer screening. Recently, the United States Preventive Services Task Force endorsed lung cancer screening, based on the results of the National Lung Screening trial. It's being recommended for high-risk current and former smokers.

The lung cancer screening would involve annual low-dose CT [computed tomography] scans for 50- to 80-year old current and former smokers. Dr. Petzel [VA Under Secretary for Health] has initiated a demonstration project within VA to assess the feasibility of, and to obtain experience with, this type of screening within VA. Minneapolis is one of VA's eight demonstration sites.

Since one of our areas of responsibility is cancer prevention screening, and we do a lot of work in tobacco, we're very interested in finding best practices to promote shared decision-making in the context of lung cancer screening, and also to promote smoking cessation in that context.

There are benefits and harms to lung cancer screening, and we are still trying to understand what those harms are and how to best communicate both benefits and harms to Veterans to help them make a patient-centered informed decision about whether they should undergo lung cancer screening.

The second issue we're pushing forward is to conduct research that reduces the harms from chronic pain for Veterans with that problem. We want to help Veterans better manage their chronic pain safely, so we need to find ways to reduce harm from opioid prescription drug abuse. We're also looking at non-pharmacological ways to help Veterans manage their chronic pain.

For example, we've just put in a proposal to evaluate the role of transcendental meditation. We're exploring those types of therapies to see if they might be of benefit to Veterans with chronic pain.

VARQU: What else should people know about the center?

Dr. Fu: One big highlight is that Dr. Timothy Wilt received the 2014 Under Secretary's Award for Outstanding Achievement in Health Services Research. This is the highest honor that a VA health services researcher can obtain. He delivered his acceptance speech on April 21.

This is really a high award for our center, and we're very proud and grateful to HSR&D to receive this recognition. 

NOTEWORTHY PUBLICATIONS



Omega-3 fatty acids show promise as an add-on therapy for fatty liver and insulin resistance, according to new VA research. (Photo: Getty Images)

Fish oil helps fatty liver and insulin resistance— Insulin resistance is a condition in which the body makes enough insulin but cannot use it effectively. This results in high blood glucose and lipid levels, contributing factors in the development of diabetes, hypertension, and fatty liver disease.

Researchers at the Iowa VA Medical Center found that a diet enriched with omega-3 fatty acids, from menhaden, improved insulin resistance and reduced fat deposits in the liver of obese and diabetic rats. The investigators also found that those effects did not occur to the same extent in rats given diets enriched with olive oil or safflower oil, which contain different forms of unsaturated fats.

The research suggests that enriching or supplementing the diet with omega-3s may be an effective way to help ward off the development of these common chronic diseases, without the risk of adverse side effects or drug interactions. (*Diabetes, Obesity, and Metabolism*, February 2013)

New guidelines released for management of high blood pressure—A new guideline for managing high blood pressure, developed by an expert panel and containing nine recommendations and a flow chart to help doctors plan treatment, was recently published in the *Journal of the American Medical Association* (JAMA).

William C. Cushman MD, chief of preventive medicine at the Memphis VA Medical Center and VA's lead consultant on hypertension, is a member of this panel, and was a coauthor of the panel's report. Dr. Cushman is also professor of preventive medicine, medicine, and physiology at the University of Tennessee Health Sciences Center. He is a past recipient of VHA's John Blair Barnwell Award for outstanding achievement in clinical science.

Dr. Cushman is currently leading a network of 20 VA sites in a six-year National Institutes of Health-funded study, called the Systolic Blood Pressure Intervention Trial (SPRINT). The goal is to determine

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careers. Awardees are selected for their pursuit of innovative research on the frontiers of science and technology and their commitment to community services as demonstrated through scientific leadership, public education, or community outreach.

The PECASE winners from VA are listed below.

Hardeep Singh, MD, MPH: Dr. Singh is chief of the Health Policy, Quality, and Informatics Program with the HSR&D Center for Innovations in Quality, Effectiveness,



and Safety at the Michael E. DeBakey VA Medical Center in Houston. Dr. Singh is also an associate professor in the department of

medicine, section of health services research, at Baylor College of Medicine. Dr. Singh's work focuses on understanding and reducing diagnostic errors in ambulatory care settings, especially those that involve missed and delayed cancer diagnoses. He also focuses on the use of health information technology to identify and reduce diagnostic errors, and on patient safety related to the implementation and use of VA's electronic health record system. Dr. Singh was previously the 2012 recipient of the AcademyHealth Alice S. Hersh New Investigator Award.

Katherine Iverson, PhD: Dr. Iverson is a researcher at the HSR&D Center for Healthcare Organization and Implementation Research and the Women's Health Sciences Divi-

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sion of the National Center for PTSD at the VA Boston Healthcare System. She is also an assistant professor at the Boston University School of Medicine. Dr. Iverson's research focuses on improving health care delivery for women, with a special emphasis on the identification and implementation of best practices of care for victims of intimate partner violence. Dr. Iverson's doctorate is in clinical psychology. She is the recipient of an HSR&D career development award.

Karunesh Ganguly, MD: Dr. Ganguly is a neurologist and clinical investigator at the San Francisco VA Medical Center, and assistant professor in residence at the University of California, San Francisco, School of Medicine. Dr. Ganguly's research focuses



on neurorehabilitation, especially for patients with gait or walking disorders. He also treats chronic neurological impairments following stroke or other brain injury. In his research, he studies new treatments for patients recovering from neurological conditions and injuries. Dr. Ganguly was also a recipient of the 2013 Doris Duke Charitable Foundation Clinical Scientist Development Award, presented to junior physician-scientists in support of their transition from

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New national guidelines for treating high blood pressure were formulated by a panel that included VA researcher Dr. William Cushman. (Photo by April Eilers)

whether reducing systolic blood pressure to a lower goal than is currently recommended can reduce the risk of vascular disease. The new guideline report contains a major revision of hypertension treatment targets, and includes new and somewhat simplified recommendations for drug treatment. Previous guidelines recommended that all adults have a target systolic blood pressure below 140 mm Hg, and that those with diabetes or kidney disease have an even lower target, less than 130 mm Hg. The new guideline keeps the same target for adults under 60, but eliminates the lower target for those with diabetes or renal disease. For people over 60, the new guideline establishes a more conservative target of 150 mm Hg or lower. This does not change the definition of hypertension, which is 140 mm Hg systolic pressure and 90 mm Hg diastolic pressure, because the authors believe lower is still better when it occurs naturally—but the recommendations are based on a lack of evidence showing that drug treatment to the lower levels is better.

The guidelines also provide recommendations on the kinds of drug treatments physicians should use in treating hypertension. If the target blood pressure is not achieved after a month, the guideline recommends increasing the drug dose or adding a second drug. Blood pressure should be monitored until the treatment goal is reached. (*Journal of the American Medical Association*, Feb. 5, 2014)

Bacterial colonization increases daily symptoms in patients with chronic obstructive pulmonary disease—

Chronic obstructive pulmonary disease is a progressive disease that makes it hard to breathe. COPD can cause coughing that produces large amounts of mucus, wheezing, shortness of breath, chest tightness, and other symptoms.

Physicians have long known that patients with COPD have a number of bacterial pathogens in their lungs, because the disease

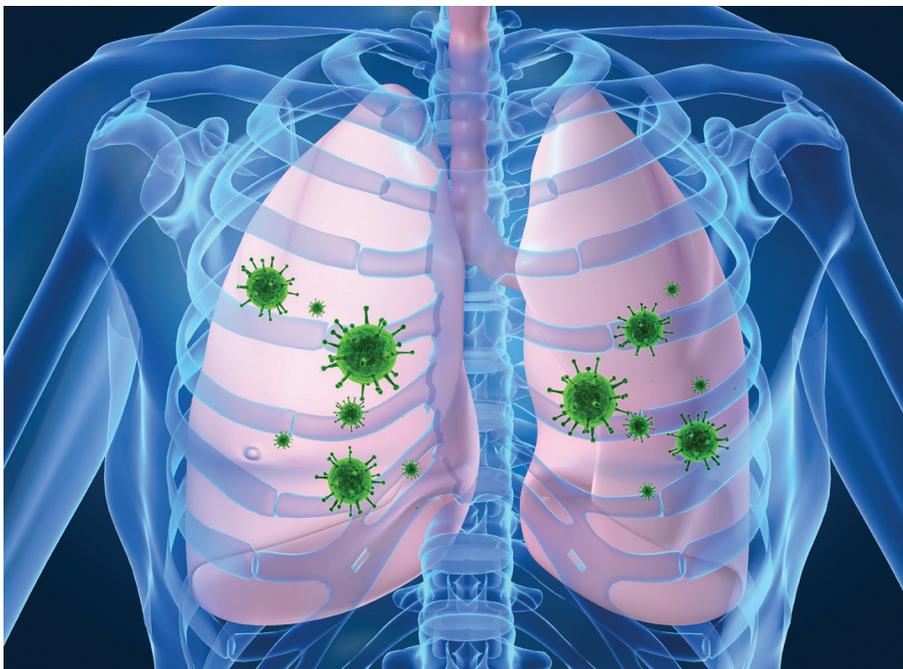
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compromises the lungs' innate defenses against bacteria, allowing bacteria to persist. Though this is abnormal, and potentially damaging, doctors have long believed that these bacteria were not harmful as long as the patient was not having a flare-up, or exacerbation, of his or her respiratory problems.

VA researchers and colleagues from the University of Buffalo School of Medicine and Biomedical Sciences recently published study results showing that COPD patients actually do experience more respiratory symptoms when their lungs are colonized by bacteria, even when they are not having acute respiratory problems. The study found that such bacterial colonization is sufficient to trigger clinically significant increases in shortness of breath, coughing, and sputum (a



Bacteria in the lungs of patients with COPD may do more harm than previously thought, according to a study by researchers with VA and the University of Buffalo. (Photo: iStock)

mixture of saliva and mucus coughed up from the respiratory tract), and to cause increased inflammation of a patient's airways.

The study team recommended that more research be done to determine why COPD makes those with the illness more susceptible to infection, and to test new drugs to prevent and treat these acute and chronic infections. Treating the infections should help improve the quality of life for patients with COPD. (*Annals of the American Thoracic Society*, March 2014)

Obesity does not affect treatment outcomes with proton pump inhibitors--About 1 in 10 Americans experiences gastroesophageal reflux disease (GERD) symptoms at least once a

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mentored to independent clinical research careers.

Brian P. Head, MD: Dr. Head is a research scientist at VA's San Diego Healthcare System, and an assistant professor in the department of anesthesia at the University of California, San Diego, School of Medicine. Dr. Head's research focuses on developing gene therapies for treating deployment-related conditions such as traumatic brain injuries and posttraumatic stress disorder. He is also looking at developing novel gene therapies to treat a variety of other disorders of the nervous system, including neurodegenerative disorders and stroke, that affect the aging Veteran population. Dr. Head was also cited as an outstanding mentor to other young scientists, having helped to shape the careers of a number of undergraduate students, graduate students, post-doctoral fellows, and anesthesia residents.



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OTHER RECENT PUBLICATIONS

Peripheral arterial disease, gender, and depression in the Heart and Soul Study. SM Grenon et al. *Journal of Vascular Surgery*, March 22, 2014.

Multitarget stool DNA testing for colorectal cancer screening. TF Imperiale, et al. *New England Journal of Medicine*, March 19, 2014.

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OTHER RECENT PUBLICATIONS

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Predictors of rehospitalization after admission for pneumonia in the Veterans Affairs health-care system. VL Tang et al. *Journal of Hospital Medicine*, March 19, 2014

Costs associated with multimorbidity among VA patients. J Yoon et al. *Medical Care*, March 2014

The new blood pressure goals in recent guidelines. WC Cushman, *Cardiometabolic Disease*, Jan. 6, 2014

Depression and Parkinson's disease: Current knowledge. L Marsh. *Current Neurology and Neuroscience Reports*, December 2013.

Explaining racial disparities in anticoagulation control: Results from a study of patients at the Veterans Administration (Department of Veterans Affairs). SR Rao et al. *American Journal of Medical Quality*, March 18, 2014 (epub ahead of print.)

Improving care of chronic conditions for women Veterans: Identifying opportunities for comparative effectiveness research. MP Bielawski et al. *Journal of Comparative Effectiveness Research*, March 2014.

Bending the curve on cardiovascular risk. SD Fihn. *JAMA Internal Medicine*, January 2014.

"Misfearing"—culture, identity, and our perceptions of health risks. L Rosenbaum. *New England Journal of Medicine*, Feb. 13, 2014

Association of high-volume hospitals with greater likelihood of discharge to home following colorectal surgery. CJ Balentine et al, *JAMA Surgery*, March 1, 2014



NOTEWORTHY PUBLICATIONS

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week. Smoking and obesity can contribute to GERD symptoms, and many foods—especially fatty, fried, citrus or tomato-based foods, chocolate, and caffeine—can worsen symptoms.

People who are obese are more likely to have GERD. Despite their higher risk for the disorder, they are just as likely as normal-weight patients to be helped by proton-pump inhibitors, the strongest treatment available for the disease, according to a recent VA study.

Led by Prateek Sharma, MD, a gastroenterologist at the Kansas City (Mo.) VA Medical Center, researchers examined data on more than 11,700 patients who had taken part in clinical trials. The team looked at data on patients with mild or a more erosive form of GERD and compared their treatment outcomes based on body mass index (BMI). BMI, a calculation based on height and weight, is used to determine obesity.

The study showed that weight was not a factor in the success of treatment with the proton-pump inhibitor esomeprazole (sold as Nexium and Essocam). People who were obese before treatment did tend to have more severe reflux symptoms, however. (*Journal of Clinical Gastroenterology*, September 2013)



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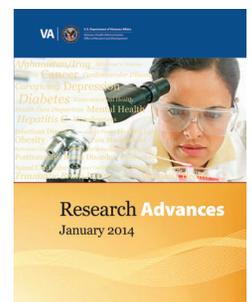
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