



RESEARCH QUARTERLY UPDATE

Office of Research and Development

www.research.va.gov

An overview of key accomplishments and initiatives in VA research



New Initiatives

VA Research holds conference on natural language processing

Natural language processing (NLP) is the ability of software programs to recognize and make sense of human speech as it is spoken, or everyday language as it is typed into a computer. It is a component of artificial intelligence, which is the simulation of human intelligence by machines.

VA Research has supported more than 20 NLP studies since 2009. The growth of electronic health records (EHRs) has spurred the need for such studies. NLP can be used to quickly extract information

Continued on page 2



HSR&D announces new initiatives to support goals of a learning health care system

In 2007, the [Institute of Medicine](#) (IOM) released a book-length report titled *The Learning Healthcare System*. The report defined and described a new conceptual approach for integrating clinical research and clinical medicine.

A learning health care system, IOM wrote, is “designed to generate and apply the best evidence for the collaborative healthcare choices of each patient and provider; to drive the process of discovery as a natural

Continued on page 2

THIS ISSUE:

Ensuring High Quality Care



From the Chief R&D Officer

Two of VA’s highest priorities are to provide enrolled Veterans with timely and high-quality health care, and to ensure that all Veterans have access to the excellent care our facilities offer. VA researchers are working to identify and evaluate innovative strategies to improve access and quality, especially for Veterans who may face



Continued on page 3

Also in This Issue

A Chat with Our Experts	4
Noteworthy Publications	7
Other Recent Publications	10
In the News	10
Honorable Mentions	11

Any health information in this newsletter is strictly for informational purposes and is not intended as medical advice. It should not be used to diagnose or treat any condition.



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

A Research holds conference on natural language processing

Continued from page 1

from text notes and other unstructured elements of these records, on a large scale. The data can then be analyzed to help answer medical questions, solve problems, and improve care.

On Sept. 9 and 10, 2015, [VA's Health Services Research and Development Service](#) (HSR&D) convened a "state of the science" conference on NLP at VHA's National Conference Center in Washington, D.C. More than 20 VA researchers attended the conference. In addition, 17 other leading NLP researchers attended, including participants from IBM, 3M, Kaiser Permanente, the Mayo Clinic, and Microsoft Research. Other VA offices, including the Office of Patient Care Services and the Office of Information and Analytics, were also represented.

In his opening presentation to the group, [Dr. David Atkins](#), HSR&D's director, named a number of research priorities that could benefit from NLP, including creating and refining disease [phenotypes](#) (the traits of an organism that can be observed, such as appearance, behavior, and metabolism) for genomic research.

Atkins suggested NLP could improve researchers' ability to control for confounding variables in comparative effectiveness research and also improve the ability to identify outcomes in research on quality and safety issues. He told attendees VA hopes to move from research that uses NLP as a tool to solve narrow problems, to research that is more innovative and advances more generalizable solutions.

Discussions at the conference also focused on how NLP might be used to better understand patients' experiences of care and coordination of care; to monitor for changes in function and disability relevant to Veterans' benefits; and to improve surveillance of new symptom clusters and emerging diseases.

Other topics of interest were methodological changes associated with NLP research, and opportunities for future research, such as speech recognition and synthesis, data visualization, and social media discourse. Finally, the attendees also discussed collaborations with academic institutions,

which could provide training for post-doctoral students specializing in the field.

More information about the conference, including its agenda, participant list, and information about several presentations and discussions, can be found [here](#). 

HSR&D announces new initiatives to support goals of a learning health care system

Continued from page 1

outgrowth of patient care; and to ensure innovation, quality, safety, and value in healthcare."

VA envisions its learning health care system as being responsive to new information; adapting to implement more effective clinical practices; and remaining committed to an ongoing mission of excellence, supported by a culture of self-reflection and continuing education.

Recently, HSR&D issued requests for applications (RFAs) to support key components of this system. The topics covered in these new RFAs are measurement science, operations research, provider behavior, and randomized program implementation.

Each RFA is designed to stimulate research in one of these topics, and to further enhance VA's status as a learning health care system. All research proposals submitted under the RFAs will be peer-reviewed by HSR&D's Scientific Merit Review Board. The board will evaluate the quality of the proposed research and make recommendations to

the director of HSR&D on scientific merit, budgets, and the duration of funding. 



Dr. Donna Washington (seated), shown with colleague Dr. Alison Hamilton, is with VA's Center for the Study of Healthcare Innovation, Implementation and Policy, one of several HSR&D groups working to strengthen VA as a learning, high-quality health care system.

barriers to care because they live in rural areas, or because they belong to racial or ethnic minorities.

Our researchers have been instrumental in understanding the needs of Veterans who live in remote areas, and in evaluating new initiatives designed to fill gaps in their care. These efforts have included understanding Veteran perceptions of access and barriers to care, developing new models for access to specialty care, and advancing innovations in connected health. The results of several new studies in these areas are discussed in this issue of *VA Research Quarterly Update*.

This issue also describes the results of a study demonstrating that, when all patients have access to the same levels of care, regardless of race, ethnicity, or socioeconomic standing, African Americans may actually have greater longevity than whites, and lower rates of heart disease—in contrast to what most private-sector studies have shown. VA can be proud of operating a health care system that affords the type of equal care that makes such findings possible.

VA researchers are already looking at how recent changes in the health care landscape, such as the [VA Choice](#) program and the [Affordable Care Act](#), are affecting access and quality for Veterans. They are also helping determine what VA can, and should, do to ensure these changes improve the quality of care the department provides. I am certain this will become an important area of emphasis for our researchers in the months and years ahead.

On a personal note, I will be retiring on Nov. 30, 2015. It has been my privilege to have served Veterans

and VA research since 2004, and to have been the chief research and development officer since June 2014. In my time with VHA, we have been at the leading edge of the transformation of medical research in many areas, including [genomics](#) and targeted therapies. We have paid increasing attention to the specific health consequences of military service, while not neglecting the issues associated with Veterans as they age.

Our [Million Veteran Program](#) (MVP), now in its fourth year, is already the largest epidemiologic cohort ever seen in the United States, and our work on understanding the causes and consequences of [posttraumatic stress disorder](#) (PTSD) and other mental health issues relating to Veterans has become

a major part of our research portfolio.

In the future, I see our researchers continuing to explore the frontiers of genomics and precision medicine, taking advantage of data from MVP and other sources; increasingly using health informatics for data mining and hypothesis testing; and continuing to improve interagency collaboration and cooperation,

especially with the Department of Defense.

These are exciting times for VA research, and I look forward to continuing to follow the progress of our researchers as they serve America's Veterans and the American public.

Timothy O'Leary, M.D., Ph.D.

Chief Research and Development Officer



Connected health—the use of communication and virtual technologies to connect patients with health care providers, regardless of location—has been a burgeoning area for VA researchers in recent years. Some of the technology in use in VA was showcased at this 2013 event.

Understanding how patients use eHealth technology



Dr. Donna M. Zulman, with Stanford University and VA's Center for Innovation to Implementation in Palo Alto, has studied how patients with chronic disease use "eHealth" technology such as phone apps and VA's My HealthVet website.

[Dr. Donna M. Zulman](#) is a physician-investigator at VA HSR&D's [Center for Innovation to Implementation](#) in Palo Alto Calif., and an assistant professor in the Division of General Medical Disciplines at Stanford University. Her research focuses on improving health care delivery for patients with multiple chronic conditions and complex health care needs. She is also interested in optimizing health-related technology to personalize care and improve outcomes for patients with complex needs.

She is the lead author of a study titled "[How Can eHealth Technology Address Challenges Related to Multimorbidity? Perspectives from Patients with Multiple Chronic Conditions](#)," which was published in the Journal of General Internal Medicine's August 2015 issue. She spoke with VARQU about the study and her work in the area.

VARQU: Would you tell us about the new study and its parameters?

Zulman: This was a study of patients who have multiple chronic conditions—for example individuals with

[diabetes](#), [heart failure](#), [cancer](#), and [depression](#)—who frequently encounter numerous and complex self-management tasks related to their different health issues. The goal was to understand how these patients currently use technology to manage and make sense of their health care, and to identify opportunities to provide better services for them in the future.

We first conducted a large survey with patients at a VA and an academic hospital to identify patients who had multiple chronic conditions, and who were already using technology—because we wanted to hear from the experts, in a sense. Then we conducted ten focus groups with patients to learn more about their technology use and needs.

What did you learn about how Veterans use eHealth technology?

There is a lot of discussion about a "digital divide" [the gap between those who have ready access to computers and the Internet and those who do not], and a common perception is that older adults and patients with more complex health issues are not really using technology.

Actually, we found that patients with multiple health issues are using technologies in a whole spectrum of different ways. They're using the Internet to find information; they're using email and secure messaging to communicate with providers; they're using social media to connect with other patients and with their caregivers, who are often at remote locations. They also use mobile apps and web-based programs to support their day-to-day activities, to track their health issues and medication use, and to support their decision making about treatments.

For this study we selected for patients who already used some tools, because we wanted to hear from them about the challenges they were having, and their desires for future health care technology. But it was

remarkable to hear about the range of technology that is in use, regardless of patients' age and health status and the presence of mental health conditions like PTSD and depression.

Is there a relationship between the conditions patients have and the technologies they use?

It's an interesting and important question, but the study wasn't really structured to answer it since we didn't have enough patients to correlate individual conditions with the specific types of technology that were used.

We did observe some interesting patterns in terms of types of technology used by older and younger patients. Older Veterans typically described using relatively older technologies, such as computer spreadsheets and health-related websites, although many also used My HealtheVet to communicate with their doctors, and several showed us mobile apps (programs on their phones) that they use to track their blood sugar and other health data.

Younger Veterans were more likely to use social media and newer communication technology such as Skype. We had a fascinating discussion with a group of younger women Veterans with PTSD who described how they regularly use Facebook to access their social network when they feel down or anxious.

What specific apps were Veterans using?

Patients were using apps on their phones to monitor specific conditions, like blood sugar levels and blood pressure, and to remind themselves about appointments and medications. They also used them to

manage mental health symptoms like depression and anxiety. Several Veterans reported using the [PTSD app](#) that VA developed, which provides information and activities to help with symptoms. Younger patients described using Facebook to connect for social support, especially around mental health conditions and active symptoms.

We also found some patients with rare conditions were reaching out to international online communities to try to learn more about their disease and treatment options. Many patients used secure messaging to communicate with doctors, and some had used videoconferencing for virtual clinic visits with remote

providers, especially doctors at specialized institutions.

What technology doesn't exist now that either your study indicated would benefit patients, or that patients themselves indicated would be beneficial in the future?

What emerged from the groups was that there is a lot of useful disease-specific technology, but there are very few applications and tools that help them with the complexity they have to

manage due to having multiple different health issues that span different specialties.

We heard that many patients were getting care from multiple providers across different institutions, both inside and outside VA, and they wanted to be able to share their records across systems. That is currently very difficult—so they either want a portable medical record or some sort of uniform platform so that their records are easily transferred from place to place.

Patients also described a need for technology



Volunteer Ralph Stott, an Army Veteran, helps former Marine Clyde "Jess" Jesse get acquainted with VA's My HealtheVet website at the Captain James A. Lovell Federal Health Care Center in North Chicago.

that consolidates information about all of their different conditions and medications. That's sometimes a challenge. And they wanted to be able to synthesize and reconcile information across different conditions, so that when they were taking medications, they could be sure that there weren't interactions between those medications.

And on the social media side of things, patients were interested in connecting with other patients who had similar constellations of issues. That was sometimes a challenge, because there are a lot of support networks for significant diseases—but those networks can be harder to find for someone who is simultaneously managing, say, diabetes and depression. It's hard for them to find a community of people who are struggling with the same issues.

What conclusions did your team draw, and what recommendations for future action did you make?

There are a lot of opportunities in patient-facing eHealth technology, but we're still in the early stages of developing these tools. So far, tools have been very much focused around specific diseases and specific tasks. We need to take a broader view of all of the patient's needs, and develop tools that can coordinate and synthesize information across conditions and support their needs in a more holistic way.

When it comes to communication technology, we need to make sure that patients can communicate with all of their providers and caregivers—in a synchronized way when possible—so that everyone working with the patient weighs in, reconciles information across all of the patient's conditions, and is on board with the patient's treatment plans.

VA provides care for a lot of patients who have extremely complicated needs across a lot of different medical and mental health issues. [Polytrauma](#) patients are a clear example of this. Their needs span different specialties, and there are a lot of clinicians and caregivers involved in their care. Building tools

that will support these patients as individuals, rather than their specific diseases, is where we need to go in the future.

What other research have you done in this area and what are you doing now?

A couple of years ago, we completed a big survey of Veterans who were using My HealtheVet, in which we found that the vast majority of them were interested in sharing their health records with others, either family members who were caregivers or providers outside VA. This was somewhat a surprise as many of us thought that patients' privacy concerns would trump their desire to share information. At the time, My HealtheVet did not offer patients the option of authorizing a caregiver or outside provider to access their records, but there is now movement to change that.

We're doing a lot of work right now to develop new care models for Veterans with complex health issues who are at high-risk of hospitalization. We're piloting a program for patients to try to address all their needs in a very patient-centered way, using a multidisciplinary team. Part of that involves using telehealth to support chronic disease management, and getting patients signed up for My HealtheVet to facilitate communication with their providers. And we've found that the program significantly increases high-risk patients' use of these services.

Another area that we've started to look into is how we integrate information about social risk factors and needs into the electronic health record. A lot of patients face financial and social challenges outside of their immediate clinical needs. We're trying to learn how we can make that information available to providers at the point of care so that we can provide patients with social services and support that will improve their health and well-being. 🙏

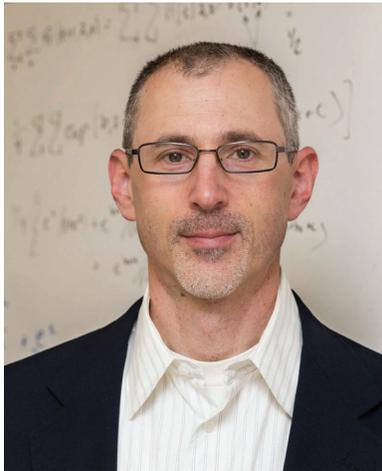
Effects of Medicaid expansions on demand for VA care—As part of the [Affordable Care Act](#) (ACA)’s effort to ensure health insurance coverage for all Americans, the federal government is willing to pay for the difference between a state’s current [Medicaid](#) eligibility level, and the minimum income level of eligibility under ACA. Federal contributions to the expansion will drop to 95 percent in 2017 and remain at 90 percent after 2020.

As the Act was originally written, states would lose all federal Medicaid funding if they refused to expand their programs to the ACA minimum. However, the Supreme Court ruled in June 2012 that the government could not withhold all federal Medicaid funding for states that chose not to expand their programs. At present, 29 states and the District of Columbia have expanded their coverage, and 21 states have not.

Many Veterans who have access to VA care also might be covered under expansions of Medicaid programs. Three researchers, led by [Dr. Austin B. Frakt](#) of the VA Boston Health Care System and the Boston University School of Medicine, looked at what the effects of this expansion might be on VA health care. Their [results](#) were published in the September 2015 issue of *Healthcare*.

By looking at the historical relationship between prior, state-level Medicaid expansions and VA enrollment and utilization, they found that if the ACA’s Medicaid expansion had been implemented in all states, enrollment for VA health coverage, acute inpatient care days, and outpatient visits would have been 9 percent, 6 percent, and 12 percent lower, respectively.

In states that did not expand Medicaid in 2012,



Dr. Austin B. Frakt is a health economist with VA and Boston University.

VA enrollment, inpatient days, and outpatient visits were, respectively, 10, 6, and 13 percentage points higher than they would have been otherwise. Therefore, the authors concluded, VA medical centers in states that did not expand Medicaid in 2014 were likely to have experienced a higher demand and longer wait times.

They conclude that “as policy makers continue to address VA capacity issues, they should be mindful of the potential role of Medicaid, and that it will change over time as more states adopt the expansion.”

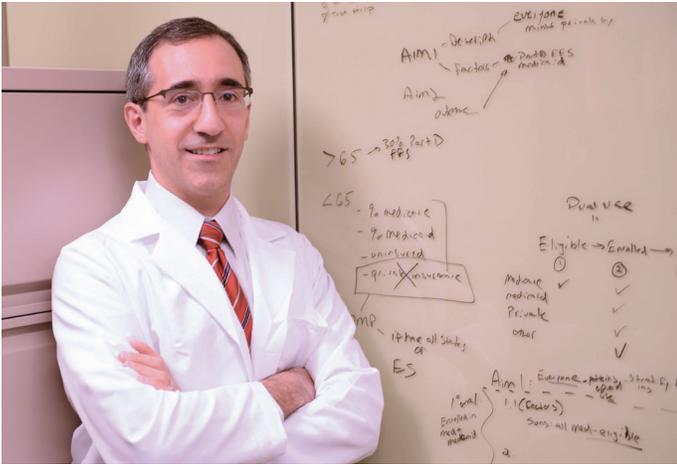
Veterans Choice program analyzed—The Veterans Choice Program, administered by VA, allows Veterans already enrolled in VA health care to get care from non-VA doctors, instead of waiting for a VA appointment or traveling to a VA facility.

Veterans are eligible for this type of care if they have been, or will be, waiting for more than 30 days for VA medical care, or if they live more than 40 miles away from a VA medical care facility or face excessive travel burdens.

In an Aug. 20 [editorial](#) in the *Journal of General Internal Medicine*, [Dr. Walid Gellad](#) of the VA Pittsburgh Healthcare System and the University of Pittsburgh reviews the history of the program, which was formally enacted in 2014. Gellad also discusses problems associated with dual care use and care fragmentation, and offers some ideas for ensuring its safe and effective implementation.

Gellad notes that while the effects of any care fragmentation as a result of the Choice Program are not yet known, “prior work has documented convincing evidence that dual use of Medicare and VA services comes with inherent risks related to care fragmentation and duplication of services.” These included higher risks of hospitalization for ambulatory care-sensitive conditions, higher cost and worse outcomes in cancer, and higher rates of rehospitalization.

He also mentions that care received outside VA



Dr. Walid Gellad is with VA's Center for Health Equity Research and Promotion, and the University of Pittsburgh.

cannot be seamlessly integrated into VA's electronic medical record and can lead to risk of duplication of services, errors, and inefficient care.

To avoid these issues as the Veterans Choice program is implemented, Gellad suggests that the risks of care fragmentation be brought to the fore in any discussions about the program and how it is to be administered.

He also believes that an early, robust, and informed evaluation of the care Veterans receive under the program be conducted in order to understand the nature and extent of care fragmentation under the program. "If the Choice Program increases access without leading to unacceptably frequent duplicative testing, dangerous drug-drug interactions, unsustainable costs, or poorer quality, then the program may be considered a success"—but that these evaluations cannot be rushed "to fit political timelines."

Finally, Gellad recommends VA ensure that medical records from Choice services, including physician visits, imaging tests, and surgical records, be easily accessible to VA physicians who may still be treating those Veterans, or who will be treating them in a few years when authorization for the program ends. "Ultimately," he writes, "if dual healthcare system use is to become the norm within VA, then improving medical data sharing has to become a priority."

The investigator concludes that the rush to

improve access does not mean quality can be ignored, and care fragmentation is not compatible with the highest quality care. He suggests that these risks to Veterans' care be "acknowledged and addressed" alongside the benefits of improving access and instituting choice.

Telemedicine works for older Veterans with depression—Approximately 6.5 million American adults older than 65 are clinically depressed. The disorder is especially problematic for Veterans, who are from two to five times more likely to exhibit substantial depressive symptoms than their civilian counterparts.

A recent [study](#) led by [Dr. Leonard Egede](#) of VA's Health Equity and Rural Outreach Innovation Center (HEROIC), in Charleston, S.C., found that talk therapy delivered by two-way video calls are at least as effective, if not more so, than in-person treatment delivery for older Veterans with depression. The study was published in the August 2015 issue of *Lancet Psychiatry*.

The researchers recruited 241 Veterans aged 58 or older with major depressive disorder from the Charleston VA Medical Center and four associated CBOCs. The Veterans were randomly assigned to either [telemedicine](#) or same-room psychotherapy, and received identical treatment: [behavioral activation](#),



Dr. Leonard Egede directs the Health Equity and Rural Outreach Innovation Center, based at the Charleston, S.C., VAMC.

Noteworthy Publications

which is an approach that emphasizes reinforcing positive behaviors.

The study team measured the participants' progress using two standard questionnaires in which patients rated their own symptoms. Participants were considered to be responding to treatment if their symptoms were reduced by at least half.

The team found that telemedicine-delivered psychotherapy produced similar outcomes to in-person treatment delivery. After a year of treatment, 39 percent of telemedicine patients and 46 percent of in-person therapy patients were no longer depressed, according to structured clinical interviews.

"Psychotherapy works for depression whether you deliver it by face-to-face or the telemedicine approach," Egede told *Reuters Health* in an [interview](#). Telemedicine, he said, is a good option for "older adults who have barriers to mobility, stigma, or geographic isolation."

"At our facility," he continued, "we have almost 40 percent of people who live in rural areas, so this is a good opportunity to be able to provide care for them without [their] having to drive long distances."

With equal care, blacks' health outcomes greatly improved—Many studies have shown that in the American population, blacks have worse health outcomes than whites in most categories, except for kidney disease. Among the possible contributing factors that are usually cited are their lower socioeconomic status and reduced access to care.

A team of VA researchers, led by [Dr. Csaba P. Kovesdy](#) of the Memphis VA Medical Center, recently published a [study](#) in the journal *Circulation* suggesting that if all patients get the same care, not only do these health differences disappear, but blacks fare better than whites, at least with respect to a few important health care outcomes.

The team looked at the mortality rates of more than 2.5 million white Veterans and more than 547,000 blacks through VA's electronic health record



Nurse Charlene Baker checks Lawrence Woodson's blood pressure at the Philadelphia VA Medical Center.

system. They found that the annual mortality rate of white males was about 32 per 1,000, versus about 23 per 1,000 for black men. Most of the patients in the studies were men, with an average age of 60 years.

Blacks were also 38 percent less likely than whites to develop heart disease, the leading cause of death in the U.S. "Our findings suggest that a health care system without barriers to access, like the VA system, could dramatically improve health outcomes in minorities," Kovesdy told [CBS News](#).

To help explain their findings, the authors suggested that blacks may have certain genetic characteristics that actually make them healthier than whites in some ways. In an editorial accompanying the study, two researchers from the [National Institutes of Health](#) (NIH) suggested that other factors also need to be considered to understand the findings, such as the possibility that blacks in the VA system may have better overall health than their race peers in the general population. 🇺🇸

For more "Noteworthy Publications" see the online version of VARQU at www.research.va.gov/pubs/varqu



Other Recent Publications

Longitudinal assessment of gender differences in the development of PTSD among US military personnel deployed in support of the operations in Iraq and Afghanistan, IG Jacobsen et al. *Journal of Psychiatric Research*, September 2015.

IOM report: Improving diagnosis in health care, released Sept. 22, 2015.

Maintenance of access as demand for substance use disorder treatment grows, A Frakt et al. *Journal of Substance Abuse Treatment*, August 2015.

How does geographic access affect in-hospital mortality for Veterans with acute ischemic stroke? DC Ripley et al. *Medical Care*, June 2015.

Are there racial/ethnic disparities in VA PTSD treatment retention? M. Spont et al. *Depression and Anxiety*, June 2015.

For more recent publications, see the online version of VARQU at www.research.va.gov/pubs/varqu

In the News



Research at VA's Human Engineering Research Laboratories has benefited many Veterans who use wheelchairs. Here, former Marine Corey Petersen tries the slalom course at the 2015 National Veterans Wheelchair Games.

limbs adapt to their new equipment. HERL researchers are also working on brain-directed interfaces to help guide wheelchairs more efficiently; and the Strongarm, a robotically assisted device to help disabled Veterans transfer from their wheelchairs into beds or chairs.

Time also spotlighted the center's unique machine shop, which enables HERL to design and manufacture its own prototypes and parts. "We've got a lifetime of work ahead of us," concluded Cooper.

Pneumonia findings surprise researchers—Pneumonia is common among older Americans, and sends hundreds of thousands of seniors to the hospital each year.

A recent [study](#) by VA researchers and researchers with the University of Michigan Medical School, featured on EurekAlert, found that many seniors with this lung infection had a better chance of surviving if they went to an intensive care unit instead of a general hospital bed—and that despite ICUs' reputation as a high-cost place to care for patients, the costs to Medicare and hospitals were the same for both groups.

The research, funded by VA, NIH, and the Agency for Healthcare Research and Quality, was published in the Sept. 22/29 issue of the *Journal of the American Medical Association*. Researchers looked at data from



In the News

Focus on HERL—On July 28, 2015, *Time* magazine's "Solutions That Matter" series of online videos focused on the [Human Engineering Research Laboratory](#) (HERL), based at the VA Pittsburgh Healthcare System and the University of Pittsburgh. HERL's mission is to improve the mobility and function of people with disabilities through advanced engineering in clinical research and medical rehabilitation.

The [video](#) included interviews with a number of HERL researchers, including [Dr. Rory Cooper](#), the lab's director. Cooper said that the program's main goal is to provide full autonomy and full participation in society for people with disabilities. He pointed out that many HERL employees were disabled themselves, and that he himself is a disabled Veteran.

Among the projects HERL is working on is a large treadmill designed to help Veterans with prosthetic



Surprisingly, the intensive care unit may be a cost-effective place to care for some pneumonia patients, according to a recent VA-University of Michigan study.

1.1 million hospital stays at nearly 3,000 hospitals between 2010 and 2012. They focused on patients on

the “bubble”—those whom doctors could send to either an ICU bed or a general bed, depending on their judgment.

The findings do not apply to patients who clearly need an ICU, such as those who cannot breathe on their own, or to those who have low risk of developing complications from pneumonia in the hospital.

[Dr. Colin Cooke](#) of the VA Ann Arbor Healthcare System and the University of Michigan Medical School, the study’s senior author, was quoted as saying, “With several recent studies suggesting that too many people are going to the ICU when their risk of death is low, we were surprised that there was a benefit to ICU admission for these patients. “

He added: "It's very rare in medicine that we find something that saves lives and doesn't cost more. But perhaps this is one of them."

The team is now evaluating if the ICU is beneficial for other conditions, including chronic obstructive pulmonary disease, congestive heart failure, and heart attack. They hope to do more to determine what characteristics made pneumonia patients most likely to do well after an ICU stay, and what factors make hospitals more or less likely to put “discretionary” pneumonia patients in an ICU bed. 📌

For more 'In the News', see the online version of VARQU at www.research.va.gov/pubs/varqu

Honorable Mentions

Schinazi receives 2015 Middleton award—[Dr. Raymond F. Schinazi](#),

a senior research career scientist at the Atlanta VA Medical Center and an investigator in the Center for AIDS Research at Emory University, received the 2015

[William S. Middleton Award](#) for VA for his pioneering



◀ **Dr. Raymond Schinazi** received VA's 2015 Middleton Award for his development of drugs to treat HIV, hepatitis B, and hepatitis C infections.

work in discovering drug treatments for infectious disease.

The annual award is the highest honor given by the VA [Biomedical Laboratory Research and Development](#) Service.

Schinazi has developed antiviral drugs that have come to form the backbone of combination regimens used in the treatment of [HIV](#) infection. He has founded

Honorable Mentions

several biotechnology companies in addition to his VA and Emory roles, holds more than 90 U.S. patents, and has authored more than 500 peer-reviewed papers.

In addition to his work on AIDS, Schinazi's expertise in virology and medicinal chemistry played a key role in the early development of the drug sofosbuvir (sold as Sovaldi), now in wide use as a highly effective treatment for hepatitis C virus infections.

The Middleton Award goes to a senior research scientist in recognition of outstanding scientific contributions and achievements in the areas of biomedical and behavioral research relevant to the healthcare of Veterans. The award honors Dr. Middleton, a former VA chief medical director who was instrumental in expanding VA medical research.

Levy receives 2015 Magnuson award—[Dr. Charles Levy](#) is the recipient of the 2015 [Paul B. Magnuson Award](#), the highest honor given to investigators by VA [Rehabilitation Research and Development](#).

Levy is chief of physical medicine and rehabilitation at the North Florida/South Georgia Veterans Health System, and the site co-director of the [Center of Innovation on Disability and Rehabilitation Research](#), which is sponsored by the VA Health Services Research and Development Service.



[Dr. Charles Levy](#), playing banjo, jams with guitarist Billy Mize, who visited the Gainesville VA to take part in an innovative speech therapy program.

Among Levy's accomplishments have been spearheading advances in power mobility; using telehealth to reach out to rural Veterans with disabilities; and using live video to deliver virtual rehabilitation services into Veterans' homes. He is currently working on a project to use a virtual reality environment to help assess and treat cognitive and emotional issues stemming from PTSD or [traumatic brain injury](#) (TBI).

Among Levy's accomplishments have been spearheading advances in power mobility; using telehealth to reach out to rural Veterans with disabilities; and using live video to deliver virtual

Levy is also recognized as the world's top expert on rehabilitation care for a rare genetic condition called [fibrodysplasia ossificans progressiva](#), and is a state champion fiddler and banjo player who delights in sharing his musical talents with Gainesville VA hospital patients and staff.

The Magnuson Award honors the life and legacy of Dr. Paul B Magnuson, who as a bone and joint surgeon continuously sought new treatments and devices for assisting his patients as they faced unique situations presented by their disability. The award is presented annually to a VA investigator who exemplifies the entrepreneurship, humanitarianism, and dedication to Veterans Magnuson displayed.

Ma cited for research on inflammatory bowel disease—[Dr. Thomas Y. Ma](#), director of the Center for Cell Biology and Molecular Medicine at the Raymond G. Murphy VA Medical Center in Albuquerque and the University of New Mexico, received the National Institute of Health's prestigious [National Research Service Award](#) for Outstanding Basic-Clinical Research.

Ma, who is also chief of gastroenterology and hepatology at UNM, is recognized internationally for his research on defective intestinal barriers as one of the causes of inflammatory bowel diseases, including ulcerative colitis and Crohn's disease.

He was specifically cited for his pioneering work in intestinal tight junction barriers and the introduction of innovative technical approaches and paradigm-shifting scientific concepts that have greatly advanced the field.

Tight junctions are complexes of proteins found in epithelial cells, including those lining the intestines. They help hold cells together and control the passage of molecules between cells, acting as a barrier to maintain normal cell function.

Ma's work has been continually funded through [VA Merit Review Awards](#) since 1990. 🎵

For more "Honorable Mentions," see the online version of VARQU on our website:
www.research.va.gov/pubs/varqu