



U.S. Department of Veterans Affairs

Veterans Health Administration
Office of Research & Development

Selected highlights of VA research: June — July 2021

Recently published studies

Shorter antibiotic treatments effective at treating UTIs in men—A shorter course of antibiotics can effectively treat urinary tract infections in men, according to a study by Minneapolis VA and Michael E. DeBakey VA Medical Center researchers. Standard treatment for UTIs is antibiotics for 7 to 14 days. In a study of more than 300 men, taking antibiotics for seven days was as effective as a 14-day course at resolving symptoms. Being on antibiotics for a shorter period of time is easier on patients who may experience side effects, say the researchers. Shortening the course of antibiotic treatment is also important for preserving the overall effectiveness of antibiotics. ([JAMA](#), July 27, 2021)

Brain games help restore function after mild TBIs—A study by investigators with VA, the Department of Defense, and Posit Science Corporation found that Veterans with a history of mild traumatic brain injury showed “vast improvement” in cognitive function after 12 weeks using BrainHQ, an online brain game program. BrainHQ, a free online game, involves visual and auditory processing exercises that target brain speed, memory, and attention. Participants played the game for one hour a day, five days a week. Participants saw four times the improvement as a control group not using BrainHQ. The study was sponsored by Posit Science, the developer of the software, through a grant from the military’s Congressionally Directed Medical Research Programs. ([Brain](#), July 27, 2021)

Equal access to VA COVID-19 testing among racial groups—Minority Veterans have had equal or greater access to COVID-19 testing from VA during the pandemic, compared with white Veterans, found a VA Greater Los Angeles study. Researchers looked at data on the nearly 1 million Veterans who sought care through VA for COVID-19 symptoms or exposure in 2020. Early in the pandemic, Hispanic, Black, and other non-white minorities were more likely than white patients to receive COVID-19 tests. As the pandemic continued, testing was similar in VA among all racial and ethnic groups. As periodic testing shortages continue, it is important to ensure that groups with increased COVID-19 exposure risk continue to have equal access to testing, say the researchers. ([Preventive Medicine Reports](#), July 22, 2021)

Nasal swab COVID-19 test less sensitive, easier than sinus swab—Nasal swabs are less sensitive than deeper sinus swabs at detecting the virus that causes COVID-19 but are still highly accurate, found a study by a VA researcher. The “gold standard” for detecting SARS-CoV-2 is a nasopharyngeal swab, which takes a sample from the back of the sinuses through the nose. Researchers reviewed studies of how effective this type of COVID-19 test was compared with nasal swabs taken from the nostrils. They found that nasal swabs were 82% to 88% effective at detecting the virus, compared with 98% for nasopharyngeal swabs. However, nasal swabs are quicker to perform and require less protective equipment. The lower sensitivity of nasal swabs is balanced by the ability to screen more patients and the easier procedure, conclude the researchers. ([PLoS One](#), July 20, 2021)

Remdesivir linked to longer hospital stays for COVID-19 patients—Treatment with remdesivir, a broad-spectrum antiviral drug, was associated with longer hospital stays for COVID-19 patients, in a study by Iowa City VA researchers. Previous studies suggested that the drug remdesivir can reduce recovery time for COVID-19 patients. Researchers looked at data on nearly 6,000 Veterans treated for COVID-19 at VA medical centers. Of those, 40% received remdesivir. Patients given remdesivir had longer median hospital stays than patients not treated with the drug. Remdesivir did not appear to reduce patients’ 30-day risk of death. Because the treatment lasts several days, remdesivir may increase the need for hospital beds for COVID-19 patients while not improving survival, say the researchers. ([JAMA Network Open](#), July 1, 2021)

Study reports on experiences of LGB Vietnam-era Veterans—Lesbian, gay, and bisexual Veterans from the Vietnam era report PTSD and poorer mental health more often than their heterosexual counterparts, according to an analysis of data from the Vietnam Era Health Retrospective Observational Study (VE-HEROeS). A greater burden of potentially traumatic events among LGB Veterans, such as childhood physical abuse, adult physical assault, and sexual assault, was associated with the differences. ([Psychological Trauma: Theory, Research, Practice, and Policy](#), July 2021)

Telehealth increases specialty pain care use—Telehealth led to an increase in specialty pain services use among VA patients with chronic care, found a study by VA Puget Sound researchers. The study examined health care use by more than 33,000 Veterans over a five-year period. Specialty pain care use increased from 11% to 16% after a telehealth program was introduced. This increase occurred in both urban and rural patients, although the increase was smaller for rural patients. Among rural patients using specialty pain care, 12% used telehealth, compared with only 3% of urban patients. The results suggest that telehealth may increase patients’ access to specialty pain services, say the researchers. ([Pain Medicine](#), June 18, 2021)

Brief intimate partner violence counseling program shows promise—A counseling program for women who experience intimate partner violence proved potentially helpful, in a VA pilot study. Recovering from IPV through Strengths and Empowerment (RISE) is an empowerment and skills-focused treatment. It involves motivational interviewing in up to six sessions. Fifteen women Veterans who experienced intimate partner violence within the past year participated in a pilot of the program. Results suggest RISE improves psychosocial well-being. Both participants and clinicians gave positive feedback on the program, with the participants giving high retention and satisfaction ratings. The results show that RISE could be effective for women who experience intimate partner violence, say the researchers. ([Psychological Services](#), June 2021)

A1c variability linked to increased risk of death in diabetes patients—Maintaining hemoglobin A1c at steady levels lowers risk of death in older patients with diabetes, found a VA Boston study. Hemoglobin A1c is a type of blood cell that is linked to sugar. Measuring A1c levels is a common test of how well diabetes is being managed. Researchers studied how variations in A1c levels affected outcomes in more than 400,000 older Veterans with diabetes. Patients whose A1c levels were less often within the targeted range set by each individual’s doctors had a higher risk of death, compared with patients whose A1c levels were more stable. More variable A1c levels were also associated with greater cardiovascular disease risk. The results show that reducing A1c variability is important for lowering mortality and cardiovascular risk in diabetic patients, say the researchers. ([Diabetes Care](#), June 14, 2021)

Social and behavioral risk factors did not increase COVID-19 mortality risk in Veterans—Social and behavioral risk factors were not associated with death from COVID-19 in VA patients, in a study of more than 27,000 Veterans. Researchers looked at data on Veterans with a positive COVID-19 test between March and September of 2020. They found that Veterans with risk factors traditionally associated with barriers to care had no higher risk of dying from COVID-19 than patients without those risk factors. Social risk factors included housing problems and financial hardship. Behavioral risk factors included tobacco, alcohol, and drug use. The results show that an integrated health system such as VA can transcend social vulnerabilities that often lead to health care disparities, according to the researchers. ([JAMA Network Open](#), June 9, 2021)

New scanning technology could help diagnose Alzheimer's disease using light—Researchers with the VA Bedford and VA Boston health care systems have developed a non-invasive optical technique to help detect Alzheimer’s disease. The new technique uses spectroscopy—measuring how light is scattered and absorbed when passing through matter—to identify structural changes in the brain. This scanning method could become a simple, completely non-invasive method of early Alzheimer’s detection, according to the researchers, and also has

potential as a way to assess the effectiveness of treatment. ([Journal of Alzheimer's Disease](#), June 1, 2021)

Ongoing projects

VA in new research agreement with National Institute of Allergy and Infectious Diseases—A new agreement between VA and NIAID, signed June 28, will expand joint research between the two agencies on infectious diseases and related topics. NIAID, part of the National Institutes of Health, is a world leader in research on infectious, immunologic, and allergic diseases. Research funded by NIAID has led to numerous therapies, vaccines, and diagnostic tests. VA and NIAID already collaborate on infectious diseases and immune system disorders. The agencies, as part of a broad international public-private partnership, work together on the [Accelerating COVID-19 Therapeutic Interventions and Vaccines](#) initiative. Moreover, NIAID directly funds some 170 research projects at VA medical centers. The new agreement will continue these efforts while promoting “greater synergy” by further leveraging the unique strengths of each agency.

VA studying 3D-printed nasal swabs to guard against future declines in traditional swabs—VA researchers are studying the safety and effectiveness of 3D-printed nasal swabs, in case of another urgent nationwide need to test patients for COVID-19 or other infectious diseases. VA hopes to offset further potential shortages of traditional swabs in the commercial supply chain and aims to provide scientific evidence of the value of 3D swabs to non-VA health systems, as part of VA’s mission to support national health care during the pandemic. Dr. Joseph Iaquinto, a biomedical engineer in the [VA Center for Limb Loss and Mobility](#) at VA Puget Sound in Washington state, is leading the study. His team aims to examine the viability of five types of 3D swabs, two of which have been produced by VA and the rest by commercial 3D printing companies.

‘STARPORT’ trial probes new approach for aggressive prostate cancer—Prostate cancer has historically been considered incurable once it has spread to parts of the body distant from the prostate gland itself. Now, a VA study is examining an innovative treatment approach for men whose prostate cancer has spread to a limited number of distant areas despite initial treatment with surgery or radiation. The trial will test the benefits of adding radiation or surgery that targets metastatic lesions to today’s standard treatment with hormones. The multisite clinical trial is funded with \$8.6 million through VA’s [Cooperative Studies Program](#). The trial is known by the acronym [VA STARPORT](#), which stands for *ST*andard Systemic TheRapy With or Without *P*ET-directed Local Therapy for *O*ligoRecurrent *T* Prostate Cancer.

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