VA Health Services Research & Development Service

2020 Program Impact

HSR&D's mission is to develop, evaluate, and rapidly implement evidence-based strategies that optimize the health and care of Veterans. HSR&D pursues research encompassing all aspects of VA healthcare, including: delivery, quality, safety, access, equity, patient satisfaction, and coordination of care—both inside and outside VA.

HSR&D 2020 Key Highlights

134 New Studies Launched

In 2020, HSR&D began 134 projects in priority areas for VHA. Among these are 24 rapid response projects related to COVID-19; 8 on suicide prevention; 6 on community care or access; and 10 on chronic diseases such as diabetes or kidney disease.

COVID-19 Efforts

Rapid Evidence Syntheses

Researchers from the HSR&D Evidence Synthesis Program are working to help synthesize publications about the novel coronavirus and COVID-19, and to translate that information quickly into usable guidance for clinicians. The completed ESP reports can be found here.

Rapid Response Projects

Following a Spring 2020 Rapid Response RFA, HSR&D funded a set of 9-month projects to investigate and address impacts of the COVID-19 pandemic and response on clinical care and delivery, patient and provider outcomes, and the VA healthcare system. These rapid response projects are intended to jumpstart research efforts and lay the groundwork for longer-term studies. Projects include:

- Impact of social distancing on mental health and suicide risk
- Impacts of telemental healthcare on high-risk Veterans with opioid use disorder
- COVID-19 in VA community living centers
- Impact of the pandemic on chronic disease care

Medication Collaboratory

VA's COVID Observational Research Collaboratory (CORC) brings together VA research experts and partners in Pharmacy Benefits Management to analyze the use and effects of drugs used as new COVID-19 therapies. The VA effort grew out of collaborations initiated by FDA to use health system data to explore possible benefits of existing drugs against COVID. A cross-ORD collaboration led by HSR&D, the collaboratory aims to improve approaches to using "real world" VA data through the work of a Methodology Committee composed of researchers working on individual projects to review and critique different approaches to dealing with common challenges in pharmacoepidemiologic studies. To date, VA and CORC have examined the effects of hydroxychloroquine, anticoagulants, remdesivir, and steroids in a national cohort of Veterans hospitalized with COVID; the first paper from these efforts will be appearing shortly in BMJ.

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Community Living Centers

HSR&D findings suggest that the current fever threshold for COVID-19 screening should be reconsidered. Repeated temperature measurement with a patient-derived baseline could increase sensitivity for surveillance purposes when applied to a nursing home population. In addition, ongoing work will determine the vital sign trend for Veterans residing in community living centers (CLCs), individually, and as a ward, to determine whether it can effectively identify Veterans and their CLC units with and without COVID-19.

Equity

Working with the Office of Health Equity, HSR&D and CSR&D researchers have examined the various effects of COVID on Veterans from various racial and ethnic groups. (*Rentsch, et al., PLoS Med* and *Ioannou, et al., JAMA Network Open*). A systematic review from the VA Evidence Synthesis Program that examined 54 studies on racial and ethnic disparities in COVID in the US was recently published. (*Mackey et al, Annals of Internal Medicine*)

COVID-19 Vaccines

An HSR&D solicitation in December 2020 called for proposals for studies on behavioral factors of Veterans' COVID-19 vaccine uptake to examine vaccine acceptance over time and factors associated with effective implementation. This will extend short-term efforts of QUERI rapid response teams that are currently helping the National Center for Health Promotion and Disease Prevention examine the early phases of VA's vaccination efforts.

Long-term Outcomes of COVID

Research teams have just been selected in response to a solicitation released at the end of 2020 to initiate a large national study to examine the long-term outcomes of Veterans who have recovered from COVID infection, and to examine the effects of COVID on long-term symptoms, function, healthcare utilization, and costs of care. This study is expected to begin in Spring 2021 and extend for 3 years.

Effects of the pandemic on non-COVID health outcomes

In December 2020, HSR&D sponsored a meeting with over 50 researchers and program partners to identify research priorities regarding how disruptions in care and social supports from the pandemic may be affecting Veteran outcomes in mental health, acute, and chronic diseases. These priorities will be addressed through a call for research supplements that was released in December and a special solicitation for service directed research on non-COVID outcomes, to be coordinated through a Coordinating Center that will conduct a national study of all-cause mortality during the pandemic.

Research Centers and Networks

- ***COnsortia of REsearch (COREs)***
  HSR&D announced the funding of a new COnsortia of REsearch (CORE) on Virtual Care. Virtual care modalities, such as telehealth, aim to increase Veteran access to services, improve workflow and workload of VA clinical team members, and engage and support Veterans to participate in their own care. The Virtual Care CORE will develop an inclusive national network of researchers collaborating to accelerate research that evaluates and improves the use of virtual care to enhance the accessibility, capacity, and quality of VA healthcare and Veteran experience.
- ***Coordinating Hub to Promote Research Optimizing Veteran-centric EHR Networks (PROVEN)***
  The PROVEN Hub is designed to provide a single point of contact for the VA research community to design, conduct, and disseminate cutting-edge, operationally prioritized research and evaluation in support of a safe, effective, and efficient implementation of the Cerner Millennium Electronic Health Record (EHR) throughout VA.
- ***Community Care Research Evaluation & Knowledge (CREEK) Center***
  The CREEK Center will serve as a policy and data expertise hub to share and disseminate information across research and operations to 1) support the research of VA Community Care investigators by sharing knowledge acquired through the implementation of VA's expanded Community Care programs (Choice, MISSION); 2) provide VA's Office of Community Care leadership with key information and findings from VA research that will help foster high quality, high impact, Veteran-centered research on Community Care; and 3) serve as a source of triage for Community Care research needs that are dependent upon input or data from the Office of Community Care.

VA HSR&D 2020 Program Impact

Key 2020 Research Findings

- Embedding social workers in VA primary care teams reduces emergency department visits. (*Cornell, et al., Health Affairs*)
- Primary care-based integrated pain team programs improve outcomes for chronic pain and may reduce reliance on high-risk opioid therapy. (*Gibson, et al., Pain Medicine*)
- Increases in opioid dosing of 20% or greater were not associated with improvements in pain. (*Hayes, et al., Pain*)
- Nurse practitioners as primary care providers may be a high-value solution to increasing access to care. (*Liu, et al., Health Services Research*)
- Veterans are at a higher risk of overdose/suicide death after stopping opioid treatment, with increasing risk the longer they had been treated before stopping. (*Oliva, et al., BMJ*)
- Anti-MRSA therapy was associated with greater 30-day mortality, increased risk of kidney injury, and secondary infections compared with standard therapy for Veterans with pneumonia. *(Jones, et al., JAMA Internal Medicine)*
- A single temperature screening is unlikely to accurately detect COVID-19 in nursing home residents. Results were presented to the CDC, who then updated temperature guidance for nursing homes less than one month later. (*Rudolph, et al., Journal of the American Medical Directors Association*)
- Palliative care during hospitalization for heart failure reduces readmissions and mechanical ventilation. (*Diop, et al., Journal of the American Heart Association*)
- The use of VHA Homeless Programs among Veterans reporting housing instability was significantly associated with reduced hazards of all-cause and suicide mortality. (*Montgomery, et al., Journal of Epidemiology & Community Health*)
- Older age is the strongest risk factor associated with mechanical ventilation and death among Veterans with COVID-19. (*Ioannou, et al., JAMA Network Open*)
- Black and Hispanic Veterans were twice as likely to test positive for COVID-19 than White Veterans, but there were no observed differences in 30-day mortality by race/ethnicity group. (*Rentsch, et al., PLoS Medicine*)
- VA policies to standardize payment and establish national dialysis contracts increased the value of community dialysis care by reducing costs without compromising access to care or survival. (*Wang, et al., Clinical Journal of the American Society of Nephrology*)

Achievements in Research

Matthew Samore, MD, earned the 2019 Under Secretary's Award for Outstanding Achievement in Health Services Research—the highest honor for a VA health services researcher. His work has resulted in major improvements to Veterans' healthcare, including advances in electronic health record data to improve measurement of prescribing practices and patient outcomes, and system-wide shifts in VA's approach to antibiotic prescribing and antibiotic stewardship. Dr. Samore directs HSR&D's Informatics, Decision-Enhancement, and Analytic Sciences (IDEAS) Center.

Eve Kerr, MD, MPH, senior investigator with and former director of HSR&D's Center for Clinical Management Research was named the 2020 recipient of the Society for General Internal Medicine's John M. Eisenberg Award for Career Achievement in Research. Dr. Kerr is internationally recognized for developing innovative, clinically meaningful methods for assessing and improving quality of care; evaluating the influence of care processes on quality; and understanding the challenges of providing care to patients with multiple chronic conditions.

Utibe Essien, MD, MPH, a researcher with HSR&D's Center for Health Equity Research & Promotion, was selected by Business Insider as one of "30 young leaders who are forging a new future for healthcare in the pandemic's shadow." Dr. Essien was selected specifically for his work on racial disparities in healthcare, which is particularly relevant because COVID-19 disproportionately affects people of color.