Research Update: *Suicide Prevention*



VA's Health Services Research & Development Service (<u>HSR&D</u>) has funded several national projects and initiatives devoted to understanding and preventing suicide. While VA works to reach Veterans who need mental healthcare (more than 1.6 million Veterans received specialized mental healthcare in FY2015)¹, HSR&D continues to support research on suicide, including risk factors, screening, and prevention.

HSR&D-Funded Centers

HSR&D's Center for Mental Healthcare and Outcomes Research (CeMHOR) focuses on improving access and engagement in mental and specialty mental healthcare for Veterans. Investigators at CeMHOR are leading one of the largest national studies involving REACH-VET, which combines a state-of-the-art suicide risk prediction model with a care coordination implementation program designed for Veterans at the highest risk of suicide. In collaboration with HSR&D/QUERI's Partnered Evidence-based Policy Resource Center (PEPReC), this newly-funded study will evaluate the effectiveness and implementation of this intervention that aims to improve targeting of suicide prevention resources to high risk Veterans across the VA healthcare system to Veterans at high risk for suicide.

Suicide prevention is also a main area of research for HSR&D's Center to Improve Veteran Involvement in Care (CIVIC). Areas of particular focus include the psychosocial and healthcare experiences of Veterans who died by suicide. For example, CIVIC investigators are examining how social support and relationships with peers, family, and others can provide a buffer against mental illness and suicide. Working with the Department of Defense, CIVIC investigators

also developed and implemented a smartphone app called the Virtual Hope Box (VHB), which serves as a reminder of positive life experiences and reasons for living, and has been downloaded more than 200,000 times since 2014. The VHB app is available for free via the <u>iTunes* App Store</u> and Google Play.

HSR&D CREATE Initiative

HSR&D has funded several <u>CREATE</u> (Collaborative Research to Enhance and Advance Transformation and Excellence) programs—consisting of three to five collaborative projects developed with clinical partners—that address issues important to suicide prevention.

The primary goal of the Evidence-Based Therapies for PTSD CREATE is to improve Veterans' access to and engagement in evidence-based treatments for PTSD—a risk factor for suicidal ideation.

The <u>Improving Rural Veterans' Access/Engagement in</u>
<u>Evidence-based Mental Healthcare</u> CREATE aims to improve treatment engagement for Veterans living in rural settings who access mental health services at VA community-based outpatient clinics.

- In 2014, suicide was the 10th leading cause of death for all ages—and the 2nd leading cause of death for individuals aged 15 to 34.²
- Although an estimated 20 Veteran suicides occurred each day in 2014, only 30% of Veteran suicides were among those who
 were receiving VA healthcare.
- Between 2001 and 2014, the rate of suicide increased among both Veterans and civilians, but the increase was larger among Veterans (32%) than adult civilians (23%).³
- The increasing rate of suicide among women Veterans prompted Congress to pass the <u>Female Veteran Suicide Prevention Act</u>, which President Obama signed into law on June 30, 2016.⁴

Specific Research Findings: 2015–2017

HSR&D's <u>suicide research overview page</u> provides access to an array of research information on suicide, including citations, studies, HSR&D briefs, reports, systematic reviews, cyberseminars, and other resources. Some specific research findings from the past two years include:

- A meta-analysis of randomized controlled trials through December 2015 showed that while most interventions did not lead to a significant reduction in suicide, the World Health Organization (WHO) brief suicide intervention and contact (BIC) was associated with significantly lower odds of suicide. British Journal of Psychiatry (in press).
- Among a cohort of National Guard soldiers, mental health service use—VA and non-VA—was strongly associated with need, including a higher number of mental health conditions (i.e., PTSD, depression) and worse physical health. Among those using services, predisposing factors (middle age and female gender) and enabling factors (employment, income greater than \$50,000, and private insurance) were associated with greater non-VA service use. <u>Health Services Research</u>. October 2016.
- Among Veterans who received mental health treatment in the past 12 months, Veterans who received services from both VA and non-VA facilities had over four times the odds of reporting suicidal ideation than Veterans who received services only from VA; however this association was significant only for male Veterans. <u>Annals of</u> <u>Epidemiology</u>, August 2016.
- Women and men who reported military sexual trauma (MST) had an increased risk of suicide. MST remained an independent risk factor even after adjusting for other known risk factors for suicide among Veterans, including mental health conditions, medical morbidity, and demographic characteristics. <u>American Journal of</u> <u>Preventive Medicine</u>, June 2016.
- Increased dose of opioids was found to be a marker of increased suicide risk, even when relevant demographic and clinical factors were statistically controlled. The vast majority of suicides involved firearms (64%), with overdose accounting for 20% of all suicides. <u>Pain</u>, May 2016.
- Of 303,716 Veterans who served in Iraq and/or Afghanistan and sought VA healthcare, 8% had received five or more central nervous system (CNS)-acting medications in 2011. CNS polypharmacy was most strongly associated with PTSD, depression, and TBI—and was independently associated with overdose and suiciderelated behaviors after controlling for known risk factors. Drugs: Real World Outcomes, March 2016.

Receiving opioid therapy at VA facilities that had higher rates of drug screening was associated with decreased patient-level risk of suicide-related events. Receiving long-acting opioid therapy at facilities that provided more follow-up after new prescriptions was also associated with decreased patient-level risk of suicide-related events, whereas receiving long-acting opioid therapy at facilities having higher sedative co-prescription rates was associated with increased patient-level risk of suicide-related events. Journal of General Internal Medicine, July 2015.

HSR&D and **QUERI** Studies on Suicide

 Optimizing Veterans' Social Relationships to Enhance Depression Care

Funding period: July 2015-June 2020

 RCT of Behavioral Activation for Depression and Suicidality in Primary Care

Funding period: March 2015—February 2019

- <u>Facilitating Use of the Veterans Crisis Line in High-Risk Patients</u>
 Funding period: July 2015—June 2019
- <u>Mindfulness-Based Cognitive Therapy for Preventing Suicide in</u> <u>Military Veterans</u>

Funding period: August 2013-July 2017

- Veterans Coping Long-Term with Suicide
 Funding period: October 2013—September 2017
- Leveraging Intensive Home Telehealth Data for Suicide Prediction and Prevention

Funding period: January 2015—December 2016

Systematic Reviews

Systematic Review of Suicide Prevention in Veterans

November 2015

References

- 1, 4 <u>VA Mental Health Care</u>. Fact Sheet. VA Office of Public Affairs, Media Relations. April 2016.
- 2. Suicide. National Institute of Mental Health.
- VA releases results of largest analysis of Veterans suicide rates. ABC News. July 7, 2016.