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Chairman Roe, Ranking Member Walz, and Members of the Committee, thank you for the opportunity to offer testimony on Veteran suicide prevention – maximizing effectiveness and increasing awareness. This is an incredibly important issue, and I commend the Committee for its leadership and convening this hearing. Over the past several years there have been a number of efforts to develop evidence-based treatments to mitigate suicide risk for Veterans at high risk for suicide and we have made significant progress. However, there remains some serious challenges in the dissemination and implementation of these effective strategies.

A Public Health Approach for Reducing the Rate of Suicide Among Veterans

The U.S. Department of Veterans Affairs (VA) has emphatically acknowledged that suicide prevention is the VA's highest priority. The *National Strategy for Preventing Veteran Suicide* for 2018-2028 provides guidance in how the VA plans to address suicide prevention efforts for Veterans.¹ Suicide is a complex problem that reflects an interaction among many different risk and protective factors at individual, family, community, regional and national levels. Given that there is no single cause for suicide, the VA has adopted a prevention framework that involves using a combination of prevention strategies to lower rates of suicide. Developed by the National Academy of Medicine,² this framework includes using universal strategies to reach all Veterans in the U.S., selective strategies that are intended to reach subgroups of Veterans who may be at some increased risk and indicated strategies that are for a relatively few number of Veterans who are at high risk for suicidal behavior, such as those Veterans who have attempted suicide or who have experienced suicidal thoughts. The focus of my testimony involves an update of a few of the indicated strategies for Veterans at high risk for suicide.

A critical approach for reducing Veteran suicides, among high risk Veterans, is to develop and test suicide prevention strategies, using rigorous scientific methods, to see if they actually prevent suicide or suicidal behavior. Once empirically validated prevention strategies have been identified, then the next step is to disseminate and implement these strategies to assure widespread adoption in the Veterans Health Administration (VHA) as well as in community health care settings who provide treatment to Veterans. These dissemination and implementation strategies also need to

be developed and tested, again using rigorous scientific methods, to increase the likelihood that these evidence-based prevention strategies are acceptable, feasible, and most importantly, actually used by VA and community health care providers in a way that maintains fidelity to the interventions as designed, even if some adaptation is required.

Suicide as a Low Base Rate Event

The problem for the scientific community is that evaluating whether newly developed prevention strategies are actually effective for preventing suicide among high risk individuals often requires very large sample sizes and multiple recruitment sites. Large samples are necessary for ensuring that studies are adequately powered to detect clinically meaningful treatment effects, including changes in suicide rates.³ This low base rate is problematic for researchers because obtaining adequate funding to support studies with enough statistical power for determining whether interventions prevent death by suicide is quite challenging due to the limited funding available. To address this problem, researchers have adopted proxy measures of suicide for evaluating the effectiveness of suicide prevention strategies, such as the occurrence of nonfatal suicide attempts rather than actual suicides, given that suicide attempts and other nonfatal suicide-related behaviors are major risk factors for death by suicide.

To improve the likelihood of accurately identifying and evaluating Veterans who may be at high risk for suicide, the VHA Office of Mental Health and Suicide Prevention has launched an initiative to develop and implement a national, standardized process for suicide risk screening and assessment, using high-quality, evidence-based measures and practices. This protocol involves three stages: (1) conducting primary screening for suicide risk using the suicide item from the Patient Health Questionnaire - 9,^{4,5} (2) conducting a secondary screen using a screening version of the Columbia Suicide Severity Rating Scale,^{6,7} and (3) conducting a VA comprehensive suicide risk evaluation using a standardized medical record template. Using standardized, evidence-based practices to screen for suicide risk will not only help to link at risk patients to appropriate health care services but will help with suicide prevention research. Support for the implementation of this program is provided by Dr. Lisa Brenner and colleagues of the VA Rocky Mountain MIRECC for Veteran Suicide Prevention.

Evidence-based Treatments to Prevent Suicidal Behavior

Our group at the University of Pennsylvania, developed a brief 10-16 session psychotherapy intervention for patients who recently attempted suicide, called Cognitive Therapy for Suicide Prevention (CT-SP). In a landmark study, funded by the National Institute of Mental Health and published in the Journal of the American Medical Association (JAMA), we found that participants who were randomly assigned to the cognitive therapy(CT-SP) group had a significantly lower suicide attempt rate and were 50% less likely to reattempt suicide than participants who were assigned to a usual care group.⁸ These findings were partially replicated using a similar intervention, called Brief Cognitive Behavior Therapy, that was developed by Drs. David Rudd and Craig Bryan.

In a randomized controlled trial, funded by the Department of Defense, researchers found that active-duty Army Soldiers who either had attempted suicide or experienced suicidal ideation and who were assigned to a Brief Cognitive Behavior Therapy (BCBT) condition were 60% less likely to make a suicide attempt during follow-up than Soldiers who were assigned to a usual care condition.⁹ Efforts are underway to further replicate the findings of these studies for supporting effectiveness of Cognitive Therapy for Suicide Prevention and Brief Cognitive Behavior Therapy among Veterans and Military Service Members, respectively. Replication of clinical interventions helps to promote the adoption and implementation of these treatments.

Although CT-SP has been recognized by the National Registry of Evidence-based Programs and Practices, the dissemination and implementation of cognitive behavior therapies for suicide prevention (CBT-SP) in VA have been limited. However, a recent clinical demonstration project, led by Dr. Mark Ilgen of the VA Ann Arbor Healthcare System and supported by the Office of Mental Health and Suicide Prevention, will train a group of therapists in CBT-SP at two hub facilities, and remotely deliver this intervention via Clinical Video Telehealth (CVT) to Veterans within two VISNs. This program will increase access for high-risk Veterans to specialized, evidence-based, suicide prevention services. Simultaneous evaluation of the feasibility, acceptability, reach, and impact of this program will provide key data to inform the potential implementation of a telehealth delivery of CBT-SP across VHA. Additional dissemination and implementation initiatives are sorely needed to ensure that Veterans at risk for suicide have access to these evidence-based treatments.

The Need for Scalable Interventions to Prevent Suicide

Although psychotherapy approaches, such as CT-SP, are effective for lowering risk, a limitation of these interventions is that they require multiple sessions and cannot be easily used in acute care settings where patients may be briefly evaluated and then referred for additional care. Emergency departments (EDs), for example, frequently function as the primary or sole point of contact with the health care system for suicidal individuals. This contact often occurs either immediately following a suicide attempt or when suicidal thoughts escalate and the individual feels in danger of acting on these thoughts. Moreover, the risk of suicide is very high following contact with acute psychiatric services, and persistent challenges exist for providing continuity of care after discharge. To address this concern, Dr. Barbara Stanley of Columbia University and I, co-developed a 20 to 40 minute intervention, called the Safety Planning Intervention (SPI).¹⁰ Although safety planning was a commonly-used strategy in cognitive behavioral therapies, we thought it would be a useful strategy if it could be found to be effective as a stand-alone intervention.

What is the Safety Planning Intervention (SPI) and how does it work to prevent suicidal behavior?

The SPI is a brief clinical intervention that we designed to decrease future risk of suicide by providing suicidal individuals with a written, personalized safety plan to be used in

the event of a suicidal crisis. The SPI uses evidence-based strategies to reduce suicidal behavior by providing prioritized coping strategies to successfully cope with a suicidal crisis. The SPI also includes lethal means counseling to reduce access to potential suicide methods such as firearms and lethal medications.

The Safety Planning Intervention consists of six key steps:

1. Identify personalized warning signs for an impending suicide crisis;
2. Determine internal coping strategies that distract from suicidal thoughts and urges such as listening to uplifting music or watching a comedy show;
3. Identify individuals who are able help patients to distract from suicidal thoughts, without necessarily disclosing suicidal thinking, as well as social settings that provide the opportunity for interaction;
4. Identify individuals, typically close friends or family members, who can provide help during a suicidal crisis;
5. List mental health professionals and urgent care services to contact during as suicidal crisis including the National Suicide Prevention Lifeline;
6. Lethal means counseling for making the environment safer.

In 2008, the SPI was adapted for Veterans and has been widely used in VHA for patients deemed to be at high risk for suicide.¹¹ Safety planning was identified as a recommended practice by the VA/DoD clinical practice guidelines for suicide prevention.¹²

In response to a priority recommendation from a federal Blue Ribbon Panel on Veteran Suicide in 2008, the Office of Mental Health and Suicide Prevention (formally, the Office of Mental Health Services) called for the development and implementation of an ED-based intervention for suicidal Veterans.¹³ The rationale for such an approach was based on the recognition that ED providers may prefer to hospitalize Veterans because of limited availability and feasibility of interventions that can be provided in the ED. Hospitalizing patients at risk for suicide may be problematic for a variety of reasons such as disrupting the person's life. The overall vision of this VA initiative was to augment emergency mental health service delivery to (1) enhance identification of Veterans at risk for suicide in VA hospital EDs, (2) provide a brief intervention to reduce risk, and (3) ensure that Veterans receive appropriate and timely follow-up care. This clinical intervention included the SPI and it was paired with follow-up contact for suicidal Veterans, resulting in an intervention we called SPI+. Follow-up contact consisted of telephone contacts after patients were discharged from an emergency department (ED). Calls were made by our trained project staff, social workers and psychologists, and were initiated within 72 hours of discharge from the ED. Calls were continued on a weekly basis until Veterans had attended at least one outpatient behavioral health appointment or until they no longer wished to be contacted.

The follow-up telephone contacts generally included three components:

1. Brief risk assessment and mood check;
2. Review and revision of the safety plan from the SPI, if needed;
3. Facilitation of treatment engagement.

The results from this clinical demonstration project were recently published in a high-impact journal, *JAMA Psychiatry*.¹⁴ The study used a cohort comparison design with 6 months follow-up at 9 VHA hospital EDs (5 intervention sites and 4 control sites). SPI+ was administered to a total of 1,186 Veterans who presented to the intervention EDs for a suicide-related concern, but for whom inpatient hospitalization was not clinically indicated. Veterans in the SPI+ condition were less likely to engage in suicidal behavior than those receiving usual care during the 6-month follow-up period. The SPI+ was associated with 45% fewer suicidal behaviors, approximately halving the odds of suicidal behavior over a 6-month period. Intervention patients had more than double the odds of attending at least 1 outpatient mental health visit following ED discharge than control patients.

In a randomized controlled trial, funded by the Department of Defense, Dr. Craig Bryan and his colleagues found that Crisis Response Planning, a brief intervention that is similar to SPI, was more effective than contracting for safety for preventing suicide attempts, resolving suicidal ideation, and reducing inpatient hospitalization among high risk active-duty Soldiers.¹⁵ Contracting for safety typically involves asking patients to promise the clinician that they will not kill themselves.

Additional clinical trials, funded by the National Institute of Mental Health, are currently underway to examine the effectiveness of SPI+ in the year following jail release and to examine the implementation of the SPI in community outpatient settings in New York State, as well as in community ED settings across the county. We are also evaluating the efficacy of SPI in acute care hospital settings, funded by the American Foundation for Suicide Prevention, and we are evaluating the effectiveness of an adapted version of SPI for Veterans using an outpatient group format, funded by the VA. Finally, a randomized controlled trial of SPI, funded by the Department of Defense, is being conducted with Military service members who were hospitalized for a suicide related event.

Quality Matters!

One of the most important lessons we have learned about implementation of the SPI in the VA since 2008 is that fidelity to the intervention involves more than simply completing a piece of paper, the safety plan form, but involves taking a collaborative and understanding approach to addressing painful experiences reported by Veterans. A 2015 study explored the implementation fidelity of safety planning in a regional VHA hospital.¹⁶ A comprehensive chart review was conducted for patients who were flagged as high risk. Safety plans were mostly complete and of moderate quality, although variability existed. Despite the general mention of safety plans in the medical record, a significant proportion of the patient charts had no explicit evidence of ongoing review or utilization of the safety plan in treatment. An additional study of safety plans in VA medical records found that the quality of safety plans was low.¹⁷ Higher safety plan quality scores predicted a decreased likelihood of future suicide behavior reports.

Higher scores on Step 3 of the safety plan form (people and places that serve as distractions) predicted a decreased likelihood of future suicide behavior reports.

The discovery of low quality safety plans highlights the need for additional training in the administration of the SPI. To improve fidelity and quality of safety plans, the VHA Office of Mental Health and Suicide Prevention recently developed a comprehensive medical record template with detailed instructions for SPI as well as a corresponding, comprehensive SPI manual. Additional training efforts to assess and improve the quality of safety plans are planned for VHA mental health providers. Simply providing additional, noninteractive training materials for SPI is not likely to be sufficient for improving the quality of the intervention, however. Additional professional training for clinical staff of SPI may be implemented, using a blended learning model, that involves (1) interactive, web-based didactic training that includes demonstration videos, (2) experiential exercises that include individualized feedback from expert trainers, and (3) an evaluation of safety planning administration using standardized rating measures.

Recommendations for Improving Suicide Prevention Efforts for Veterans

1. Adopt and fully support the VA National Strategy for Preventing Veteran Suicide;
2. Increase funding of research to develop and evaluate suicide prevention practices in VHA and community settings;
3. Develop novel suicide prevention strategies, such as apps or web-based formats, that are feasible and acceptable to patients and staff;
4. Disseminate and implement evidence-based interventions to reduce suicide risk in VHA, including cognitive behavior therapies for suicide prevention;
5. Evaluate the quality of evidence-based, suicide prevention practices that have been implemented for Veterans at risk for suicide;
6. Provide training programs for clinical staff to improve the administration of evidence-based practices to reduce suicide risk; incentivize and support staff in using these practices;
7. Evaluate the effectiveness of dissemination efforts of evidence-based suicide prevention practices for Veterans at risk for suicide.

Thank you for the opportunity to offer this testimony. I welcome any questions from the Committee.

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