

**Implementation and Evaluation of a Staff Educational Intervention to Standardize and Enhance  
Provider Adherence to the Safety Planning Intervention and Linkages with Patient Outcomes**

CPT Ryan C. Parry, Maj Mavis J. Gee and MAJ Thales D. Lopes

Daniel K. Inouye Graduate School of Nursing, Uniformed Services University

Fort Bragg, NC

14 April 2023

## Distribution Statement

Distribution A: Public Release.

The views presented here are those of the author and are not to be construed as official or reflecting the views of the Uniformed Services University of the Health Sciences, the Department of Defense or the U.S. Government.

## Copyright Acknowledgement Statement

“The author(s) hereby certify that the use of any original work by another author or copyrighted material used in the DNP project entitled: *Implementation and Evaluation of a Staff Educational Intervention to Standardize and Enhance Provider Adherence to the Safety Planning Intervention and Linkages with Patient Outcomes* is either appropriately cited within the manuscript or used with formal written permission of copyright release by the owner of the original work.”

PARRY.RYAN.CHRIST  
OPHER.1239664225

Digitally signed by  
PARRY.RYAN.CHRISTOPHER.1239  
664225  
Date: 2023.04.13 10:36:37 -04'00'

Ryan Parry, BSN, RN, CPT  
Psychiatric Nurse Practitioner Program  
Daniel K. Inouye Graduate School of Nursing  
Uniformed Services University  
13 April 2023

LOPES.THALES.DEI  
VES.1274401784

Digitally signed by  
LOPES.THALES.DEIVES.12744017  
84  
Date: 2023.04.13 10:31:02 -04'00'

Thales Lopes, BSN, RN, MAJ  
Psychiatric Nurse Practitioner Program  
Daniel K. Inouye Graduate School of Nursing  
Uniformed Services University  
13 April 2023

GEE.MAVIS.J.12859  
71604

Digitally signed by  
GEE.MAVIS.J.1285971604  
Date: 2023.04.13 10:43:23 -04'00'

Mavis Gee, BSN, RN, Maj  
Family Nurse Practitioner Program  
Daniel K. Inouye Graduate School of Nursing  
Uniformed Services University  
13 April 2023

**Disclaimer:** The views expressed herein are those of the authors and do not reflect the official policy or position of the Uniformed Services University, Department of Defense, or the U.S. Government. There are no financial relationships that exist between the speakers and a commercial entity.

Table of Contents

Abstract..... 4

Introduction..... 6

Significance of the problem..... 6

Relevance to Military Nursing..... 7

Clinical Question..... 9

Literature Review of Solutions..... 9

Solution Synthesis..... 10

Focus Area..... 10

Business Case Analysis..... 11

Organizing Framework..... 11

Project Design..... 12

HIPPA Concerns..... 17

Project Results..... 18

Analysis of the Results..... 21

Implications to Practice..... 24

Future Directions for Research and Practice..... 24

Conclusion..... 25

References..... 26

Appendices..... 31

## ABSTRACT

**Project Title:** Implementation and Evaluation of a Staff Educational Intervention to Standardize and Enhance Provider Adherence to the Safety Planning Intervention and Linkages with Patient Outcomes

**Background:** In 2021, there were 47,646 suicides in the US, and 580 in the US military. Despite prevention efforts, these numbers continue to rise. Military suicide impacts mission readiness and unit morale. The Safety Plan Intervention (SPI) is a prevention tool recommended by the 2019 VA/DoD Clinical Practice Guideline (CPG).

**Clinical Question:** Among providers treating active duty service members at Fort Bragg, does the implementation and evaluation of a staff educational intervention regarding SPIs improve provider adherence to the CPG and reduce patient suicidality outcomes?

**Project Design:** The Model for Evidence-Based Practice Change was the organizing framework. Provider education on SPIs was implemented, along with a pre-post evaluation of provider knowledge and data collection of: (a) SPI implementation rates; (b) SPI quality assessment; (c) patient suicidality rates; and (d) unscheduled behavioral health reengagement.

**Analysis of Results:** The education implementation resulted in a knowledge increase of 17.7% but did not translate into a practice change. Of 184 charts reviewed, 46 had SPIs. Using the VA/DoD CPG as standard, this represents a 28% compliance rate. Using Defense Health Agency and Office of the Surgeon General policies as standard, there was a 52% compliance rate. Additionally, discrepancies between the CPG and federal policies were identified. Due to the low number of SPIs, we were unable to adequately collect data for patient suicidality rates and unscheduled behavioral health visits.

**Implications for Practice:** The project demonstrated that SPI implementation in the clinic was inconsistent with the VA/DoD CPG and federal policy guidelines and discrepancies exist in the policies providers are expected to follow. Policies should be deconflicted and SPI implementation should be standardized and augmented with continued education and leadership oversight. Using current evidence

and best practice guidelines will benefit patients by reducing suicide behaviors and emergency healthcare utilization.

### **Abbreviated Version**

**Project:** Provide education to BH providers on the importance of SPIs and their proper implementation.

Pre and post intervention: assess rates of completion to standardized SPI implementation, percentage of completeness of SPI in the chart, and suicide behaviors in patients.

**Impact:** Inconsistencies in suicide prevention policies were revealed. More consistent policies may improve SPI utilization and patient suicide outcomes.

## **Implementation and Evaluation of a Staff Educational Intervention to Standardize and Enhance Provider Adherence to the Safety Planning Intervention and Linkages with Patient Outcomes**

Suicide incidence in the United States totaled 47,646 in 2021 (Curtin, et al., 2022). The US military reported 580 suicides in the same year for active duty, Reserve components, and National Guard units of the Department of Defense (Department of Defense, 2022). Findings in the Department of Defense's *Annual Suicide Report* (2022) suggest that the number and incidence rate of suicide continues to increase despite prevention efforts. The *VA/DoD Clinical Practice Guideline for the Assessment and Management for Patients at Risk for Suicide* (2019) outlines numerous recommendations including safety planning interventions (SPI), pharmacotherapy, means restriction, and counseling. Evaluations of the SPI demonstrate clinical effectiveness for reducing suicide and applicability of available resources to a broad population (Boudreaux et al., 2017; Bryan et al., 2017; Chesin et al., 2016; Gamarra et al., 2015; Green et al., 2018; Stanley et al. 2018; Zoana et al., 2018). In one study, SPI utilization reduced suicide attempts by 76% among active duty soldiers who initially presented to an emergency behavioral health appointment (Bryan et al., 2017). Clinical practice guidelines (CPGs) enhance standardization of care and reduce unnecessary treatment variations; however, sustained uptake of CPGs cannot be guaranteed without organizational efforts to enhance CPG (Amant et al., 2015).

Our scholarly project implemented a staff education module that focused on standardizing SPI content and enhancing provider adherence to the SPI. Our goal was to evaluate linkages between provider SPI adherence and patient outcomes, measured by ideation frequency on question nine of the PHQ-9 and unscheduled reengagements with behavioral health for suicide-related issues.

### **Significance of the Problem**

Suicide is the second leading cause of death in the US in individuals aged 10-34 (Hegegard et al., 2021), and this holds true for the military population as well. In the US military, the suicide rate is 24.3 suicide deaths per 100,000 active duty service members and in the general US population and similar age range of 17-59, the rate is 18.2 per 100,000. While the suicide incidence rates may appear different

between the general US population and service members, when adjusted for a representative distribution of age and gender, this difference becomes statistically insignificant (Defense Health Agency, 2022). The *DoD 2021 Annual Suicide Report* states that 328 active duty service members died from suicide that year. Suicide rates in 2021 are significantly lower than 2020, although 2020 rates were significantly higher than 2019 (Department of Defense, 2022), and may represent an anomaly related to the COVID-19 pandemic. Over 70% of those who died by suicide had been seen by the military health care system in the 90 days prior to suicide, and only 43.9% of those who suicided had a documented behavioral health diagnosis (Defense Health Agency, 2022). These statistics suggest that while many service members were seen for care prior to a suicide, many were not being seen routinely for behavioral health conditions. Furthermore, the data reflects missed opportunities to potentially improve health outcomes through the implementation of a safety plan.

The presence of the *VA/DoD Clinical Practice Guideline for the Assessment and Management for Patients at Risk for Suicide* (2019), or any other clinical practice guideline, does not ensure compliance. In order for guidelines to be adopted, an active implementation plan must be used (Ament et al., 2015). Initial adherence to guidelines is variable, and long-term adherence is not sustained in more than 50% of the studies on this issue (Ament et al., 2015). Cyclical evaluations and re-education may be necessary to sustain changes in practice, especially when there is potential to positively impact patient outcomes and military readiness.

### **Relevance to Military Nursing**

Military service members make a commitment to the nation and to their fellow service members. In return, the military is committed to support and care for its members to the best of its ability. This commitment includes using the most up to date modalities when treating physical and mental health. The military health care system has dual obligations to care for the service member and to support the military mission. The Army's Medical Department's motto "To Conserve Fighting Strength" (U.S. Army Medical Center of Excellence, n.d.) exemplifies the expectation that they work to support readiness and sustain a superior military force. Military Advanced Practice Registered Nurses are often the first providers to

assess a patient with behavioral health concerns. Assessing and treating suicidal ideations is an important component of their role, and can impact patient outcomes (Goldstein, 2021).

Behavioral health issues have a discernible effect on readiness, but the exact impact of suicide is more difficult to quantify. In terms of the impacts of behavioral health conditions, the US Army Public Health Center (2022) reported that in 2021, 19% of active duty soldiers had a history of one or more behavioral health diagnoses and 9.6% of active duty soldiers were diagnosed with a behavioral health condition. In 2015, the 3<sup>rd</sup> Infantry Division found that between 2-3% of its force was non-deployable due to behavioral health issues (Curley & Warner, 2017). Regarding suicide, every service member has an individual impact on readiness, and every suicide diminishes unit readiness. Aside from the direct impact of losing the soldiers who die from suicide, there is the possibility of a contagion effect. Soldiers were more likely to engage in suicide behaviors in units where there was a suicide or attempted suicide in the past year (Urasano et al., 2017). On average, each suicide in the US directly impacts 135 people and costs an estimated 1.3 million dollars (Cerel et al., 2019). Suicide not only affects the member and their family, but also their unit and the unit's ability to maintain a healthy and effective fighting force.

In addition to improving military readiness, this project aligned with the 2021 National Patient Safety Goals, the Military Health System Quadruple Aim (Stinner et al., 2014), and High Reliability Organization (HRO) Principles. The 2022 National Patient Safety Goals of “identify patient safety risks” and “reduce the risk for suicide” (The Joint Commission, 2022) involve implementing effective screening procedures to identify patients who require additional treatment interventions, as well as a plan to mitigate the risk for suicide. The HRO Principles support a culture of safety, providing training for providers, and implementing interventions to address specific safety risks (Veazie, 2019). Finally, the Military Health System Quadruple Aim of improving the health of the population is addressed through suicide reduction and reducing the per capita cost of healthcare.

Implementing evidence-based practice (EBP) into daily patient care can reduce the variance in healthcare. However, translation of the research into practice is an active process by medical professionals and some may fall back into old habits and impact sustainability by as much as 50% within one year

(Ament et al., 2015). Based on this information we cannot assume adherence will be maintained in an organization just by the mere presence of a clinical practice guideline. Efforts such as cyclical adherence evaluations and reeducation must be in place to sustain the change.

### **System or Clinical Question**

The clinical question guiding our project was: Among providers treating active duty service members at a large military installation in the Southeastern United States, does the implementation and evaluation of a staff educational intervention regarding Safety Plan Interventions improve provider adherence to the clinical practice guideline and decrease patient suicidality outcomes (measured by question 9 of the PHQ-9 screening tool), as compared to current practice?

### **Literature Review of Solutions**

We used the following databases: PubMed and PsycInfo and the VA/DoD website for the latest clinical practice guideline on management of suicidality. The search keywords included: suicide AND prevention AND (military OR Army OR Air Force OR Navy OR Marine); suicide AND (safety plan); suicide AND (safety plan) AND (military OR Army OR Air Force OR Marine); “safety planning intervention with follow-up and combination”; “suicide prevention safety planning”. Our inclusion criteria included: literature in the past nine years (to include key studies not found in the standard practice of using the past five years), English language, studies with patients aged 18 and older, focusing on suicidality management or safety planning, US military, and in psychiatric settings. Exclusion criteria included studies involving pediatric or adolescent populations, and those focusing solely on PTSD or military sexual trauma. Our initial search yielded a total of 580 studies. We conducted a title and abstract screening and excluded 421 due to those being deemed not relevant. We then conducted full text screening for the remaining 159 articles and excluded 150 additional articles due various reasons. For example, wrong population, wrong intervention, or not feasible (see Appendix A). There were nine articles included for the final review (see Appendix B).

### **Solution Synthesis**

The SPI is a brief face-to-face intervention initiated by the provider and the patient to lessen acute suicidal risks (Stanley, et al., 2018). Its core strategy is identifying personal warning signs, coping strategies, potential distraction from suicidal thoughts, a list of medical professionals and family members to help during a crisis, and emphasis on reducing the potential use of lethal means. The SPI was not intended to replace other suicide prevention treatment modalities, but to complement them. The *VA/DoD Clinical Practice Guideline for the Assessment and Management of Patients at Risk for Suicide* (2019) recommended four non-pharmacological suicidal treatment options, to include cognitive behavioral therapy, dialectical behavioral therapy, problem solving based psychotherapies, and SPI. However, SPI stands out among these options as a valuable clinical tool completed in one brief session of 20 to 40 minutes (Stanley, et al., 2018), as opposed to the 10 or more sessions that the other treatments would require. Safety plan interventions have been shown to reduce suicidal behaviors after Emergency Department visits, decrease hospitalizations, increase use of crisis call centers, increase outpatient encounters, decrease psychiatric emergency room visits, lower suicidal thought intensity, and decrease suicidal behavior in the future (Stanley, et al., 2018; Zoana, et al.; Bryan, et al., 2017; Greene, et al., 2018; Boudreaux, et al., 2017; Gamarra, et al., 2015). Given the benefits of safety planning and the fact that in one study more providers wanted training (Moscardini, et al., 2020), we believed this to be a worthwhile endeavor to combat suicide in this population.

### **Focus Areas**

This evidence-based practice project aimed to reduce suicide behaviors by optimizing the use of safety plan interventions. Our project's main focus areas included:

- a. Providing standardized training on the SPI to local providers in a behavioral health outpatient clinic at a large Defense Health Agency (DHA) MTF in North Carolina.
- b. Evaluating provider's adherence to and implementation of the SPI components based on the *VA/DoD CPG for the Assessment and Management of Patients at Risk for Suicide* (2019) and the

*DHA Administrative Instruction 6025.06* (2022), and the *Office of the Surgeon General (OTSG) Policy Memo 21-011, Behavioral Health At Risk Management Policy* (2019).

- c. Evaluating linkages between provider SPI adherence and patient outcomes (suicidality frequency and rate of unscheduled reengagement with behavioral health for suicide-related issues) over a period of five weeks pre-intervention and 16 weeks post-intervention.
- d. Monitoring provider knowledge of SPIs, as measured pre-intervention and at monthly meetings for three months after intervention, as monitored by a 10-item multiple choice test.

Standardization of SPI use was intended to have patients conceptualize and utilize alternatives to self-harm. Patient contact time in a busy outpatient clinic is limited and behavioral health resources are finite. Our goal was to have providers use the face-to-face time that they have with their patients in the most efficient manner possible.

### **Business Case Analysis**

Please see Appendix C for the project's Business Case Analysis.

### **Organizing Framework**

This project's organizing framework was the *Model for Evidence-Based Practice Change*, which is a modification of *The Iowa Model*. This model consists of five phases, starting with assessing the need for a change in practice, then progressing through finding and analyzing the best evidence; designing and planning the proposed change to practice; implementing and evaluating the change; and then long-term implementation and sustainment of the new practice (Dang et al, 2019). This model was chosen because of its built-in feedback loops, ease of use, and its orientation of application. This model used a scientific approach to problem solving and guided the team through the process.

The loss of lives and resources through suicide became evident with the data gathered through the *Department of Defense Suicide Event Report* (2022) and the *Department of Defense Annual Report on Suicide in the Military* (2022) and justified a change in practice (Phase One). The evidence supported the standardized utilization of the SPI as an effective and low-cost intervention (Phases Two & Three). Phase Four was designing the manner in which SPI standardization was to be implemented as a pilot

project. This process included a closer engagement with stakeholders to further discuss the project, approval processes, and tackling logistical issues that could affect implementation. The model's next step (Phase Five) was implementing and evaluating the effectiveness, which occurred once all local stakeholders, leadership, and IRB approvals were obtained. The final step of maintaining change included our team sharing the findings and lessons learned as well as presenting to local leadership and at the Uniformed Services University of the Health Sciences (USUHS). Our project ended by engaging with local leadership to identify local champions to execute a smooth transition to the maintenance phase and to continue work in reducing suicide behaviors.

## **Project Design**

### **General Approach**

This project implemented an evidence-based provider education program for suicide reduction: the standardized suicide safety plan intervention (SPI) for patients identified as an elevated risk for suicide. This was followed by an evaluation of how that implementation influenced: (a) provider rates of standardized SPI implementation (assessed via chart audits); (b) quality assessments of completed SPIs (as measured using a standardized scoring system); (c) patient's rate of suicidality (assessed using question nine which pertains to suicidal thinking frequency on the PHQ-9); and (d) unscheduled patient reengagement with behavioral health assets related to suicide (ie: walk-in visit for suicidal thoughts or being brought to the emergency room). It was a pre-post evaluation of the above-described outcomes (a, b, c, and d). The goal was to ensure awareness of the recommendations in the VA/DoD CPG regarding SPI, and how to implement it in a standardized manner to all patients. Pre and post education chart audits were completed and overall implementation of safety plans and their clinical implications on patient outcomes were assessed. In addition, we assessed the providers' general knowledge of SPIs using 10 questions (see Appendix D). The 10-question quiz was administered before the intervention and monthly for three months after the intervention.

## Setting and Population

This project was based at Fort Bragg, North Carolina, the largest US military installation, with a population of over 45,000 soldiers. Alongside the military forces are 200,000 eligible beneficiaries living within a 40 mile radius of the installation (Department of Public Health, 2019). Given the large size of the community, medical capabilities have become robust and tailored to the population served.

Of all the soldiers on the installation, 28% of women and 16% of men experienced behavioral health disorders. According to the installation's Department of Public Health's *Community Strengths & Themes Assessment* (2019), 61% of the study participants responded that sleep was a top need to improve health and 60% felt that alcohol and drug abuse was a top behavioral health issue for the command, followed by stress and depression (Department of Public Health, 2019). These issues are risk factors for suicide and require appropriate medical support. The installation's medical capabilities included 160 total hospital beds with about 66,000 patients visiting the hospital's emergency department and a total of more than 11,000 patients admitted annually (Department of Public Health, 2019). Mental health services include embedded behavioral health providers in multiple military units around the installation, six outpatient clinics, a Substance Use Disorder Clinic, the Soldier Recovery Unit, and Behavioral Health Consultants in patient-centered medical homes (Womack, n.d.). In addition, there is one inpatient behavioral health unit with a 12-bed capacity. Behavioral health staff include military and civilian Registered Nurses, Psychiatric Mental Health Nurse Practitioners, Licensed Clinical Social Workers, Psychologists, Psychiatrists, Addiction Counselors, and Behavioral Health Technicians. Our project specifically looked at one behavioral health clinic on Fort Bragg, with providers who were treating active duty service members.

## Procedural Steps

The project timeline was created (see Appendix E) to establish milestones throughout the year. The project itself was then broken down into five phases and paralleled the *Model for Evidence-Based Practice Change* (see Appendix F). Faculty, stakeholders, and local leadership were engaged throughout the entire process. In Phase One our team assessed the need for a change in practice. Suicide is an

ongoing issue in America and reducing suicide in the military has been identified as a priority by the Executive Branch (The White House, 2021). Using current evidence, we developed our PICOT question, created and implemented a literature search strategy, evaluated the literature regarding best practices for reducing suicide by using the Johns Hopkins Research Evidence Appraisal Tool (Dang, et al., 2019), (see Appendix G), and created a Prisma flow diagram (see Appendix A). In Phase Two, we assembled, analyzed, and synthesized the body of evidence to support our selected project solution and subsequently developed a data analysis plan. Phase Three involved the development of our project design, we finalized written training guides, and engaged more closely with local leadership and stakeholders to ensure our project was aligned with their needs and requirements. We presented our project proposal and received local IRB exemption and formal command approvals. During Phase Four we implemented and evaluated change in practice by initiating training for providers and leadership at an outpatient behavioral health clinic. We used standardized education in a PowerPoint presentation based on the work of Stanley and Brown (2019), to teach behavioral health providers about SPIs and then evaluated the impact on their ongoing practice and patient outcomes (see Appendix H). We established a time frame for safety planning implementation then conducted data collection and analysis via chart audits. Afterward, final reports and presentations were prepared for local leadership and stakeholders. Finally, Phase Five included integration of the change, maintaining practice change, and disseminating results. We worked with local leadership to identify champions to whom we could smoothly transition this project for sustainability.

The process to collect data began when the project team and Phase II Site Director met with the military treatment facility Information Technology (IT) representatives who instructed the project team how to extract data for chart auditing. The main application used to extract our initial data in Citrix Workspace was the Discern Reporting Portal. From Discern, we ran a report called the Standard Appointment List for Patients. We entered the parameters of our search which included codes for the specific clinics we were auditing, date range, start date, and end date. After generating the data we exported a de-identified list of patient encounters which were stored in a secure Excel spreadsheet. All eight providers at the clinic were originally included in the project; however, due to coding in the

electronic health record only six providers were able to have their patient data exported to our report. Ten percent of their patient encounters were randomly selected to be included in the pre-intervention audits from August 1, 2022 through September 6, 2022. Provider SPI education took place on August 29, 2022 and September 6, 2022 during which there were eight participants. Provider knowledge of SPIs was assessed prior to the education and at monthly intervals over the next three months to ensure effectiveness of the educational intervention. Post-intervention audits included 10% of patient encounters which were randomly selected for the remainder of September, October, November and December 2022.

The audit initially yielded 218 charts. Of those charts, 34 were excluded because of the following reasons: group therapy note ( $n=6$ ), psychological testing ( $n=1$ ), mass readiness intake ( $n=14$ ), and no data attached to chart ( $n=13$ ). Chart demographics showed 84% enlisted ( $n=155$ ) and 16% officer ( $n=16$ ) and one retiree. Their age ranged from 20-57, with a mean age of 33 and a median of 32. Gender breakdown was 72% male ( $n=133$ ) and 28% female ( $n=51$ ).

### **Data Analysis Plan**

The intervention for this project was to conduct safety plan training for providers. The four outcomes intended to be measured at the conclusion of the project were (a) provider rates of standardized SPI implementation; (b) quality assessments of completed SPIs (see Appendix I); (c) patients suicidality; and (d) unscheduled patient reengagement with behavioral health assets related to suicide (e.g., walk-in visit for suicidal thoughts or presentation to the emergency room) (see Appendix J).

Rates of standardized SPI implementation were evaluated using provider rate of SPI completion and categorized as “completed, partially completed, or not completed”. As this data is ordinal in nature, the Wilcoxon Signed-Rank test was considered, however due to the low rate of SPI use, the test could not be performed. To evaluate quality assessment of completed SPIs, we conducted chart audits and assigned a completion percentage to provide SPIs 0-100. Each chart was given a score of 0-3 (0= blank chart, 1= not personalized, 2= some evidence of personalization, and 3= specific to the individual and personal). Given that there are seven items against which each patient chart was assessed, the total score ranged from 0-21 (Gamarra, et al., 2015). A mean value for these scores was calculated for provider chart

reviews before and after implementing the educational update. While originally it was planned to conduct a paired  $t$ -test to assess the differences, it was not conducted due to an inadequate number of SPIs. The third outcome, which measured patient's suicidality was evaluated using question nine on the PHQ-9, which reads "Over the last two weeks have you had thoughts that you would be better off dead or hurting yourself in some way?" Respondents score the item as 0, 1, 2, or 3 representing not at all, several days, more than half the days, or nearly every day, respectively. This was used as a proxy for patient suicidality and was previously demonstrated to be an effective measurement tool by Louzon, et al. (2016). Due to overall low implementation of the SPI and data saturation not being achieved, linkages between question 9 of the PHQ-9 and SPI completion could not be established. The final outcome, unscheduled patient reengagement with behavioral health for suicide-related care, was evaluated by chart audit as a score of 0 for no additional reengagement or 1 for any unscheduled reengagement. The Wilcoxon Signed-Rank test was originally chosen as an analytic tool for this outcome but was not used due to low data collection.

While the provider pre and post tests were not originally part of the outcomes this project was focusing on, a statistical analysis with a  $t$ -test assuming unequal variance was conducted to determine if the change in scores was statistically significant. This test was most appropriate because it compared the averages between the pre and posts tests. This was an unpaired  $t$ -test since we could not connect each test with the specific provider that completed the test, but the same group of providers was tested before and after the education.

Patients' charts were analyzed to determine if they would need a safety plan by the recommendations set out in the VA/DoD CPG, *DHA Administrative Instruction 6025.06* (2022) and *OTSG Policy Memo 21-011, Behavioral Health At Risk Management Policy* (2019). For the purpose of this project, the OTSG policy memo and the DHA instruction were considered to have standards that align with each other but were significantly different from that of the VA/DoD CPG (see Appendix K). Compliance to standards was checked pre and post intervention.

The VA/DoD CPG (2019) includes tables (Sidebars 2a., 2b., p. 23, 24) that categorized patients into high, intermediate, and low risks for suicide, and further delineated them into acute and chronic risk

levels (see Appendix L). High acute risk was reserved for those who are actively having suicidal ideations with plan and/or intent to die, as this often requires hospitalization. A moderate acute risk involves someone who endorses suicidal ideation but does not have any intent to act on these urges. A low acute risk would be someone who either does not have suicidal thoughts, or has vague thoughts with no intent to act, and is without a plan or with a vague plan. Chronic high-risk patients are those with either a chronic physical or mental health diagnoses, a history of suicidal ideation, or a history of substance use disorder. Intermediate chronic risk patients have similar characteristics to chronic high-risk patients, but voice coping mechanisms and reasons to live. The chronic high and intermediate risk patients are more often managed on an out-patient basis and were often the type of patients that were seen at the clinic that was the focus of this project. The CPG lists recommended actions for chronic high and intermediate risk patients which include routine health care, routine mental health care, the development of coping skills, and the formulation of a "well-articulated safety plan" (p. 24).

While the DHA Administrative Instruction included the same acute risk stratification table, it lacked the corresponding chronic risk stratification table. As such, it only mandated that a safety plan be initiated when the patient is at a high or intermediate acute risk or when admitted to a behavioral health unit in the hospital. Aside from suggesting that a safety plan be initiated, reviewed, or updated when "clinically indicated" (p. 16), there were no instructions for those who did not fit into these categories. Similarly, the OTSG policy memo encouraged consideration of chronic risk factors, but clearly stated that "this policy focuses on required actions based on the acute risk level" (p. 5).

### **HIPAA Concerns**

This project was EBP and not original research. It relied on knowledge that had been established and published in previous research, government reports and clinical practice guidelines. This project translated evidence into practice, and while this separation from research removed most ethical dilemmas, personal privacy and self-determination were still relevant (Terhar, 2021). Clinicians were expected to implement SPI, as it is an evidence-based practice and is supported by the DHA and DoD. Patients, however, had the right to choose whether to participate in this practice, and had the right to decline

treatment. In these cases, the patient would be educated on the purpose and treatment value of the SPI, and their decision to decline this part of their treatment would be respected and documented. As this is not considered to be a research study or randomized control experiment, the patient was not a research participant and consent was not requested or required.

This EBP project relied on auditing patient charts to track compliance in utilizing SPIs and to determine if the intervention was effective at reducing the incidences of suicide (through monitoring the responses to question nine on the PHQ-9, as well as tracking unscheduled behavioral health interactions). Chart audits were completed using the electronic health record and Citrix Workspace and took place in a clinical office setting in a controlled access location. No personal identifiers were used to track patient status or provider details. No patient identifiers were used in the written report of this project. Each patient had a unique numeric identifier attached to their information and this master list was kept under double lock in the facility. Charts were audited based on dates (before and after clinician education), and reporting consisted of whether an SPI was documented as being completed, the score of question nine of the PHQ-9, and if there were any additional unscheduled encounters with behavioral health providers for suicide-related concerns. These protocols served to protect patient privacy and reduce any chance of a breach.

### **Project Results**

While not initially projected to be a measurable outcome in the project, one of the most salient issues was the variability in SPI practices. Safety Plan Interventions were found to be present in 25% of pre intervention charts, and 25% of post intervention charts, showing no change in practice. During chart audits, the patients were assessed by the project team to determine if they would have needed an SPI by the most rigorous interpretation of the VA/DoD CPG, and also if they would need SPIs by DHA and OTSG standards. The providers were following the DHA and OTSG for the most part, but these standards only called for safety plans to be created when patients were presently having suicidal thoughts, or when they were hospitalized for mental health reasons. As the overall percentage of SPIs in the chart was small,

there was not adequate data to determine if any meaningful change in compliance happened after the intervention.

Of the 167 charts that would have required SPIs by CPG standards, only 46 charts were found to have one. This represents a 28% compliance rate. Of the 77 charts that would have required an SPI by DHA and OTSG standards, only 40 were found to have one. This represents a 52% compliance rate. Descriptive statistics for the sample are depicted in Table 1. There were six charts that did not meet the criteria set forth in the DHA Instruction and OTSG Memo for an SPI, but still had SPIs in their charts.

**Table 1.**

**SPI Completion Rates**

|             | Number of Charts | SPI Required by DHA/OTSG Memo | SPI Required by CPG |
|-------------|------------------|-------------------------------|---------------------|
| SPI Present | 46               | 40                            | 46                  |
| SPI Absent  | 138              | 37                            | 121                 |
| Total (n)   | 184              | 77                            | 167                 |
| % Present   | 25               | 52                            | 28                  |

Among the providers involved in the project, a 10-question multiple choice survey on SPI knowledge was administered before the educational intervention, and at monthly interventions for September, October, and December. While initial test scores were low (mean score of 56%), they increased after the educational intervention for the first two months (to a mean score of 73% and 82%), and then reduced to a mean score of 66%. The aggregated mean score for post intervention was 73.7%, which represents an increase of 17.7 percentage points. Provider knowledge regarding SPIs increased from pre to post evaluation, however, we did not identify changes in practice. Statistical analysis of the pre and post test scores was done using a *t*-test assuming unequal variance since each individual test could not be linked to a specific provider. More specifically, the analysis was a dependent *t*-test since it was evaluating the same group of people before and after the test. The *t*-test results showed  $p=0.62$  and  $t=2.26$

which indicated that the 17.7 percentage point increase in the post test mean was statistically insignificant.

**Table 2.1**

**Pre-Intervention Provider Knowledge Scores**

| Date of Testing        | Number of Participants | Mean Score |
|------------------------|------------------------|------------|
| August 29, 2022        | 6                      | 53%        |
| September 6, 2022      | 1                      | 70%        |
| <b>Total Pre Tests</b> | <b>7</b>               | <b>56%</b> |

**Table 2.2**

**Post-Intervention Provider Knowledge Scores**

| Date of Testing         | Number of Participants | Mean Score   |
|-------------------------|------------------------|--------------|
| September 6, 2022       | 4                      | 73%          |
| October 27, 2022        | 5                      | 82%          |
| December 1, 2022        | 5                      | 66%          |
| <b>Total Post Tests</b> | <b>14</b>              | <b>73.7%</b> |

Of 218 charts audited, 184 were retained for analysis. Charts were excluded that did not include any data ( $n=13$ ), were an incidence of group therapy ( $n=6$ ), were a psychology evaluation ( $n=1$ ), and were completed as a mass readiness intake encounter ( $n=14$ ). The lack of standardization of safety plans at the initiation of the project persisted following the intervention. Of the 184 charts that were reviewed, only 46 had SPIs. Of these, there were 12 SPIs in the five week pre-intervention group, and 34 SPIs in the 16 week post-intervention group. Due to a general low rate of completion, no statistical analysis was completed, and any interpretation of this data must be done with caution.

We evaluated how the impact of the intervention would affect the patient's score on question nine of the PHQ-9 as a proxy for patient suicidality. Linkages between question nine of the PHQ-9 and SPI completion could not be established due to overall low SPI implementation. We were unable to draw any conclusions about whether the enhanced SPI training would affect question nine of the PHQ-9.

We also looked at how the intervention would affect the number of unscheduled behavioral health interventions (walk-in clinic use or ER visits). In the month prior to the intervention, there were three visits, and in the four months after the intervention, there were four visits, which translates into 0.08 visits per project day in the pre-intervention group, and 0.06 visits per project day for the post intervention group. When breaking these numbers down further, two of the three patients who had an unscheduled visit in the pre-intervention group had SPIs in their chart, and five of the seven post intervention patients had safety plans in their charts. Due to the small numbers of patients with safety plans and unscheduled behavioral health visits, no conclusions can be drawn regarding this outcome.

### **Analysis of the Results**

The extensive data analysis showed low utilization of the SPI in clinical practice at this particular clinic. In cases where the safety plan was utilized, it was provider-dependent on how it was completed, although it was found that steps three and four of the SPI were often completed with the same information. While it is intended for section three to be focused on people and places who can distract the patient from their crisis, and step four to include people who the patient can ask for help, this distinction was often lost in practice. Step six, which focused on creating a safe environment with reduced access to lethal means, was often missing or had minimal and/or superficial input. For example, 70% of military suicides were completed with a firearm (Department of Defense, 2022), making the section on how to make the environment safer a natural place to discuss safe firearm storage or temporary removal of firearms. This represents a missed opportunity for reducing suicides by reducing access to lethal means. Although there was not a high enough proportion of safety plans for the patients that were surveyed, this finding cannot be assumed to hold internal or external validity and must be interpreted cautiously.

Chart audits repeatedly revealed patients who may require a chart audit if following the VA/DoD CPG, but not the OTSG memo or the DHA instruction. This means that for patients who may have had chronic high risk but low acute risk (ie: a patient with chronic PTSD, ready access to firearms, and a history of suicidal ideation clinicians, but no current suicidal ideation) the clinician was able to state that their clinical judgement does not indicate the need for a safety plan. This is not intended as a critique on the clinical care that is provided, or the skills of the clinicians, but as a commentary on the discrepancies of policy. The providers were often following the DHA and OTSG instructions for practice, but this is allowing for a practice gap. Instead of implementing SPIs before serious incidents, they are often only used after a mental health crisis has happened. An abundance of literature shows the value of SPIs as preventative measures, but only if they are used. Known comorbidities of suicide are chronic mental health conditions. In suicide reporting forms, 46% of subjects had a psychiatric diagnosis (Department of Defense, 2021). In addition, chronic medical conditions are believed to be a significant factor in half of all suicides (Saddock, et al., 2015). Therefore, the use of a proven suicide prevention strategy is imperative.

### **Barriers and Limitations**

General barriers to SPI implementation in practice included competing priorities in the unit, clinician behavior/individual motivation, lack of time, inability to attend continuing education, and a perceived unsupportive organizational culture (Curtis et al., 2016). These barriers were overcome through continued education regarding the importance of the VA/DoD CPG, DHA Instruction, and OTSG Policy Memo, and their potential impact on patient outcomes. It is our belief that healthcare providers want to use their time efficiently to create better patient outcomes, and by reminding them of this, they may be more likely to participate in the project and adhere to a standardized SPI. We also leveraged the authority of clinic and department leadership to improve project participation and CPG adherence.

This EBP project does have several limitations that need to be considered. The timeline was short, with each provider only attending one in-person educational event and only a four-month data collection period afterwards. Data collection was done manually, which was very time consuming, and did not allow for the EBP team to expand their work into other clinics. Although it was planned that data

collection for eight providers would be included, two of the providers could not have their data inputted into the system due to database issues. These issues resulted in a smaller data pool than originally intended, with only six providers from one clinic being involved. Two of the remaining providers were reluctant to engage in the project, verbalizing that they did not think that it was appropriate for students to be instructing credentialed providers on their practice. Provider participation in pre- and post-tests was variable. Although eight providers attended the educational sessions, only seven completed the pre-test, and post-test completion rates varied from month to month.

Although we examined 10% of the available charts from that time period, the majority of the charts examined did not have safety plans attached to them. This meant that it was not possible to draw any conclusions about the impact of completing the safety plan. This intervention was limited to one clinic and six providers. The demographics of the audited patient charts show a greater representation of females (28%) and older service members (range of 20-57, mean age of 33) as compared to military demographics. Seventy percent of service members are younger than 25 years old, 19% of Army officers are female, and 14% of enlisted members are female (Council on Foreign Relations, 2020). It was beyond the scope of this project to be able to generalize these findings beyond this clinic.

Midway through the data collection, there was an unscheduled change in leadership at the clinic. The new leader was not aware of the project and the project team was not aware of the leadership change. This may have resulted in a difference in outcomes. In addition, six months prior to the EBP project, the clinic's electronic health record changed to MHS Genesis. There were many questions from providers about where the SPI was located, how it could be printed and given to the patient, and how the original SPI would be lost when overwritten by a different provider. In the chart review, SPIs were found documented in the body of charts, as well as in the form where they were intended to be kept. Increased familiarity with the electronic health record will hopefully reduce these inconsistencies, as it is theoretically possible that safety plans were created on paper but not attached to the chart.

Due to time constraints (getting approvals and database access), a thorough review of the charts was not done prior to the intervention. While a needs assessment was completed that showed an exigency

for improving suicide outcomes, the educational needs of the clinic and their current SPI practices were not identified before intervention. Had an in-depth analysis of the charts happened before the intervention, the education could have been more tailored to the needs of the clinic. In this case, there could have been more focus on the importance of completing a safety plan with patients at risk, who to complete a safety plan on, and the proper way to answer sections three, four, and six of the SPI.

### **Implications to Practice**

This project was designed to educate providers on SPIs, improve adherence to clinical practice guidelines, and decrease patient suicidality outcomes. While all these goals were not achieved, this project demonstrated that SPI implementation in this clinic was inconsistent with the standards set out in the 2021 DHA Instruction, the 2019 OTSG Memo, and the 2019 DoD/VA CPG. The standardization of SPI implementation would reflect current evidence and best practice guidelines, and be beneficial to patients, possibly decreasing suicide rates and reducing health care expenditures. Safety Plan Interventions are not associated with negative side effects, and reviewing coping skills, supportive people, professional services, and harm reduction are all worthwhile therapeutic interventions. Additionally, proper completion of the SPI may lead to suicide means reduction through safer storage of, and reduced access to, firearms.

### **Sustainment and Dissemination**

The project results were disseminated to hospital leadership, unit level leadership, and providers at the project site. All providers who were educated as part of the project were personally contacted to both thank them and to share the results of the EPB project. To reach a broader audience, the final project was submitted for publication in academic nursing and behavioral health journals. Finally, this group was invited to present project findings at a national nurse practitioner convention after graduation.

### **Future Directions for Research and Practice**

The discrepancy between CPG and practice was evident, but the implications for following the CPG and having more safety plans completed was not as clear. A longer and broader project would hopefully show more results. Following providers over a period of a year or longer may show how their

clinical practice has changed. Involving providers from multiple clinics at multiple locations may create data that is more generalizable. A more thorough and refined educational program that was supported by credentialed individuals may reduce the resistance that was faced by students speaking to clinicians.

Asking for providers to volunteer for the project may improve participation rates, but it may also skew the data with a self-selection bias. The initial intervention was an education slide show presentation based on the work of Stanley and Brown (2019), and while follow up emails were sent to the providers after the initial presentation, there was not a formal continued education process that would have encouraged educational gain and practice change. Future projects should consider a more standardized follow-on plan.

### **Conclusion**

Suicide reduction among all people is a worthy goal. Reducing suicide in the military strengthens the nation's fighting force and improves readiness while honoring the commitment of those who volunteered to serve their country. In an organization that provides holistic access to health care and directly oversees the wellbeing of its members, every attempt should be made to maintain their health and reduce the incidence of suicide. Implementing the safety plan with service members is a worthwhile endeavor to examine how this evidence-based tool affects the rate of suicide. While our project was not able to definitively show a link between provider education and patient outcomes, we did demonstrate a lack of standardized safety plan intervention and a need for continuing education among providers. While our statistical data can only be interpreted with caution, our practice findings showed a great variance of practice and a variance of standards set out in different practice guidelines. A greater standardization of guidelines may influence a standardization of practice, and if the findings in the literature can be carried forth, then a greater utilization of safety plans will lead to an overall reduction in suicide rates.

## References

- Ament, S. C., de Groot, J. A., Maessen, J. C., Dirksen, C. D., van der Weijden, T., & Kleijnen, J. (2015). Sustainability of professionals' adherence to clinical practice guidelines in medical care: A systematic review. *BMJ Open*, 5(12), e008073. <https://doi.org/10.1136/bmjopen-2015-008073>
- Boudreaux, E. D., Brown, G. K., Stanley, B., Sadasivam, R. S., Camargo, C. A., & Miller, I. W. (2017). Computer administered safety planning for individuals at risk for suicide: Development and usability testing. *Journal of Medical Internet Research*, 19(5), e149. <https://doi.org/10.2196/jmir.6816>
- Bryan, C. J., Mintz, J., Clemans, T. A., Leeson, B., Burch, T. S., Williams, S. R., Maney, E., & Rudd, M. D. (2017). Effect of crisis response planning vs. contracts for safety on suicide risk in U.S. Army Soldiers: A randomized clinical trial. *Journal of affective disorders*, 212, 64–72. <https://doi.org/10.1016/j.jad.2017.01.028>
- Cerel, J., Brown, M. M., Maple, M., Singleton, M., van de Venne, J., Moore, M., & Flaherty, C. (2019). How many people are exposed to suicide? Not six. *Suicide & life-threatening behavior*, 49(2), 529–534. <https://doi.org/10.1111/sltb.12450>
- Chesin, M. S., Stanley, B., Haigh, E. P., Chaudhury, S. R., Pontoski, K., Knox, K. L., & Brown, G. K. (2016). Staff views of an emergency department intervention using safety planning and structured follow-up with suicidal veterans. *Archives of Suicide Research*, 21(1), 127–137. <https://doi.org/10.1080/13811118.2016.1164642>
- Council on Foreign Relations. (July 13, 2020). *Demographics of the U.S. military*. <https://www.cfr.org/back-grounder/demographics-us-military>
- Curley, J. M., & Warner, C. H. (2017). Improving awareness of behavioral health readiness. *Military Medicine*, 182(7), e1738–e1746. <https://doi.org/10.7205/MILMED-D-16-00343>
- Curtin, S., Garnett, M., & Ahmad, F. (2022). Provisional numbers and rates of suicide by month and demographic characteristics: United States, 2021. *Vital Statistics Rapid Release Report*, 24, 1-7. <https://www.cdc.gov/nchs/data/vsrr/vsrr024.pdf>

- Curtis, K., Fry, M., Shaban, R., & Considine, J. (2016). Translating research findings to clinical nursing practice. *Journal of Clinical Nursing*, 26, 862-872. <https://doi.org/10.1111/jocn.13586>
- Dang, D., Melnyk, B., Fineout-Overholt, E., Yost, J., Cullen, L., Cvach, M., Larabee, J., Rycroft-Malone, J., Schultz, A., Stetler, C., & Stevens, K. (2019). Models to guide implementation and sustainability of evidence-based practice. In B. Melnyk & E. Fineout-Overholt (Eds.), *Evidence-based practice in nursing and health care* (4th ed., pp. 378-427). Wolters Kluwer.
- Defense Health Agency. (2022). *The calendar year 2020 DoDSER annual report*. Psychological Health Center of Excellence Research and Development Directorate, Defense Health Agency. [https://health.mil/-/media/Files/MHS/PublicationFiles/2020DoDSER\\_CY20\\_508\\_revised08032022.ashx](https://health.mil/-/media/Files/MHS/PublicationFiles/2020DoDSER_CY20_508_revised08032022.ashx)
- Defense Health Agency. (2022). *Administrative instruction 6025.06: Suicide risk care pathway for adult patients in the defense health agency*. <https://www.health.mil/-/media/Files/MHS/Policy-Files/Signed-DHAAI-602506-Suicide-Risk-Care.ashx>
- Department of Defense. (2022). *Annual Suicide Report Calendar Year 2021*. [https://www.dspo.mil/Portals/113/Documents/2022%20ASR/Annual%20Report%20on%20Suicide%20in%20the%20Military%20CY%202021%20with%20CY21%20DoDSER%20\(1\).pdf?ver=tat8FRrUhH2IIndFrCGbsA%3d%3d](https://www.dspo.mil/Portals/113/Documents/2022%20ASR/Annual%20Report%20on%20Suicide%20in%20the%20Military%20CY%202021%20with%20CY21%20DoDSER%20(1).pdf?ver=tat8FRrUhH2IIndFrCGbsA%3d%3d)
- Department of Public Health, Fort Bragg. (2019, Feb 25). *Community Health Assessment*. <https://tricare.mil/-/media/Files/MTFs/Central-North-CarolinaRegion/Womack/Publications/FBDPH/Community-Health-Assessment-2019.pdf?la=en>
- Department of Veterans Affairs, Department of Defense. (2019). *VA/DoD clinical practice guideline for the assessment and management of patients at risk for suicide*. <https://www.healthquality.va.gov/guidelines/MH/srb/VADoDSuicideRiskFullCPGFinal5088212019.pdf>
- Gamarra, J. M., Luciano, M. T., Gradus, J. L., & Wiltsey Stirman, S. (2015). Assessing variability and implementation fidelity of suicide prevention safety planning in a regional VA healthcare system. *Crisis*, 36(6), 433–439. <https://doi.org/10.1027/0227-5910/a000345>

Goldstein. (2021). Veteran suicide. *Journal for Nurse Practitioners*, 17(5), 632–633.

<https://doi.org/10.1016/j.nurpra.2020.10.025>

Green, J. D., Kearns, J. C., Rosen, R. C., Keane, T. M., & Marx, B. P. (2018). Evaluating the effectiveness of safety plans for military veterans: Do safety plans tailored to veteran characteristics decrease suicide risk? *Behavior Therapy*, 49(6), 931–938. <https://doi.org/10.1016/j.beth.2017.11.005>

Hegegard, H., Curtin, S., & Warner, M. (2021). *Suicide mortality in the United States, 1999-2019*. Centers for Disease Control and Prevention. <https://www.cdc.gov/nchs/products/databriefs/db398.htm>

Joint Commission. (2022). 2022 Behavioral health care and human services national patient safety goals. [https://www.jointcommission.org/-/media/tjc/documents/standards/national-patient-safety-goals/2022/simple\\_2022-hap-npsg-goals-101921.pdf](https://www.jointcommission.org/-/media/tjc/documents/standards/national-patient-safety-goals/2022/simple_2022-hap-npsg-goals-101921.pdf)

Louzon, S. A., Bossarte, R., McCarthy, J. F., & Katz, I. R. (2016). Does suicidal ideation as measured by the PHQ-9 predict suicide among VA patients?. *Psychiatric Services*, 67(5), 517–522. <https://doi.org/10.1176/appi.ps.201500149>

Martin, C., Phillips, R., & Johnson, C. (2020). Improving provider awareness to statin prescribing guidelines: A quality improvement project. *Journal of Vascular Nursing: Official Publication of the Society for Peripheral Vascular Nursing*, 38(1), 25–28. <https://doi.org/10.1016/j.jvn.2019.11.001>

Moscardini, E. H., Hill, R. M., Dodd, C. G., Do, C., Kaplow, J. B., & Tucker, R. P. (2020). Suicide safety planning: Clinician training, comfort, and safety plan utilization. *International Journal of Environmental Research and Public Health*, 17(18), 6444. <https://doi.org/10.3390/ijerph17186444>

Office of the Surgeon General. (2019). *Policy Memo 21-011: Behavioral Health At Risk Management Policy*.

Sadock, Sadock, V. A., & Ruiz, P. (2015). *Kaplan & Sadock's synopsis of psychiatry: behavioral*

- sciences/clinical psychiatry* (Eleventh edition / Benjamin James Sadock, Virginia Alcott Sadock, Pedro Ruiz.). Wolters Kluwer.
- Stanley, B., Brown, G. K., Brenner, L. A., Galfalvy, H. C., Currier, G. W., Knox, K. L., Chaudhury, S. R., Bush, A. L., & Green, K. L. (2018). Comparison of the Safety Planning Intervention With Follow-up vs Usual Care of Suicidal Patients Treated in the Emergency Department. *JAMA psychiatry*, 75(9), 894–900. <https://doi.org/10.1001/jamapsychiatry.2018.1776>
- Stanley, B. & Brown, G. (2019, August 20). *The safety planning intervention to reduce suicide risk for people with SMI* [Power Point Slides]. Substance Abuse and Mental Health Services Administration. [https://www.nasmhpd.org/sites/default/files/SAMHSA%20SPI%20SMI%20PPT%20final\\_2.pdf](https://www.nasmhpd.org/sites/default/files/SAMHSA%20SPI%20SMI%20PPT%20final_2.pdf)
- Stinner, D. J., Sathiyakumar, V., & Ficke, J. R. (2014). The military health care system. *Journal of Orthopaedic Trauma*, 28(Supplement 10), S11–S13. <https://doi.org/10.1097/bot.0000000000000209>
- Terhar, M. (2021). Ethical responsibilities of translation of evidence and evaluation of outcomes. In K. White, S. Duudley-Brown & M. Terhaar (Eds.), *Translation of evidence into nursing and healthcare* (3<sup>rd</sup> ed.) (pp.229-241). Springer Publishing Company.
- Ursano, R., Kessler, R., Naifeh, J., Herberman Mash, H., Fullerton, C., Bliese, P., Zaslavsky, A., Ng, T., Aliaga, P., Wynn, G., Dinh, H., McCarroll, J., Sampson, N., Kao, T., Schoenbaum, M., Heeringa, S., Stein, M., & Army Study to Assess Risk and Resilience in Servicemembers (STARRS) Collaborators (2017). Risk of suicide attempt among soldiers in army units with a history of suicide attempts. *JAMA Psychiatry*, 74(9), 924–931. <https://doi.org/10.1001/jamapsychiatry.2017.1925>
- US Army Medical Center of Excellence. (n.d.). *About medical center of excellence*. <https://medcoe.army.mil/about-us>
- US Army Public Health Center. (2022). *2021 Health of the Force Report*. <https://phc.amedd.army.mil/Periodical%20Library/2021-hof.report.pdf>

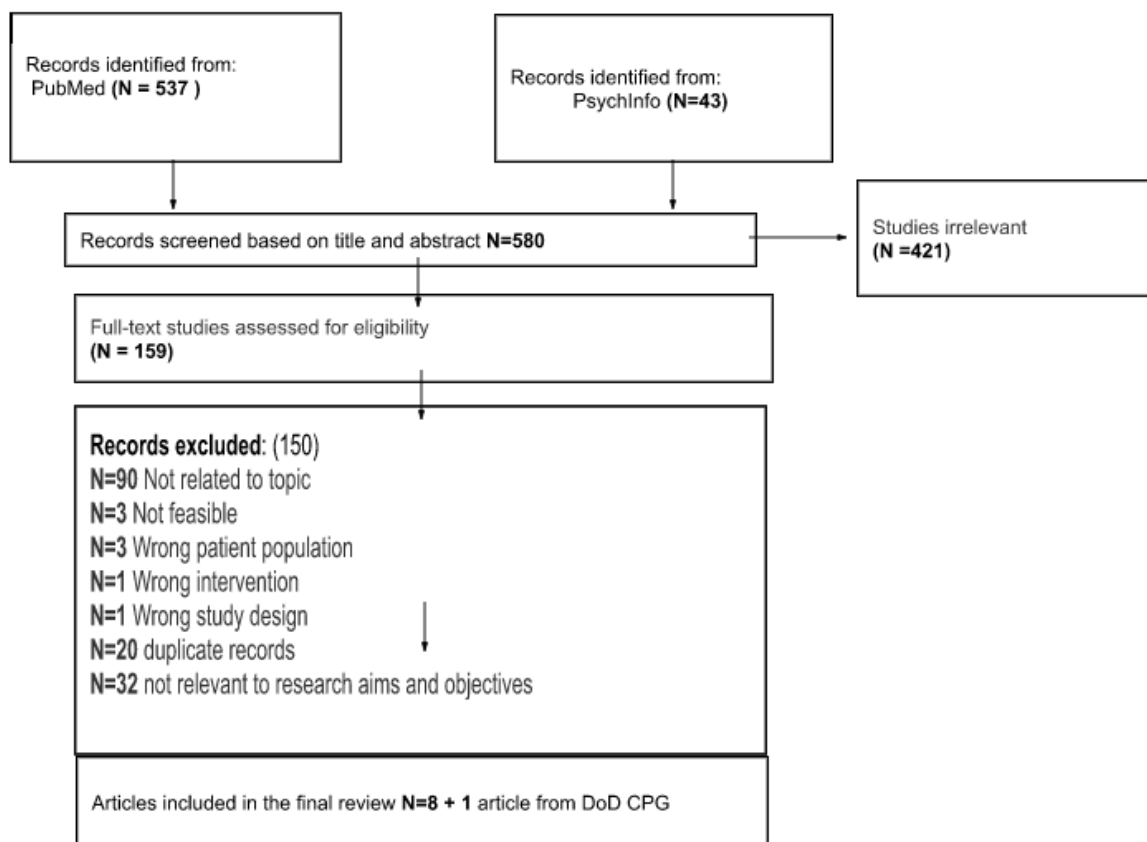
Veazie S, Peterson K, Bourne D. (2019). *Evidence brief: Implementation of high reliability organization principles*. Department of Veterans Affairs. <https://www.ncbi.nlm.nih.gov/books/NBK542883/>

The White House. (2021, November 2). Reducing military and veteran suicide: Advancing a comprehensive, cross-sector, evidence-informed public health strategy. <https://www.whitehouse.gov/briefing-room/statements-releases/2021/11/02/fact-sheet-new-strategy-outlines-five-priorities-for-reducing-military-and-veteran-suicide>

Womack Army Medical Center. (n.d.). *Service Member Behavioral Health*. <https://womack.tricare.mil/Health-Services/Mental-Health-Substance-Abuse/Service-Member-Behavioral-Health>

Zoana, J., Simberlund, J., & Christos, P. (2018). The impact of safety plans in an outpatient clinic. *Crisis*, 39(4), 304–309. <https://doi.org/10.1027/0227-5910/a000495>

## Appendix A

**Figure A. PRISMA Flow Diagram**

## Appendix B.

Figure B. Literature Table

|                        | Study Purpose/Aims                                                                                                                                           | Research Questions/Hypotheses (IF different from/specifically described separately from study purpose & aims)                                                                                                    | Study Design                                                                                                                                                                                                                   | Total Sample Size (How many initially, how many at final analysis?)                                                                                                                                          | Sampling Plan                                                                                                                                                                                                              | Independent Variables AND LEVEL OF MEASUREMENT                                                                                                                                                        | Dependent Variables AND LEVEL OF MEASUREMENT                  | Statistical Analyses - what tests were used for which research questions?                                                                                                                                       | Results                                                                                                                                                                                                                                                                                                                                                                                         | Strengths (how promoted internal/external validity)                                                                                                                                                                                                                                                                     | Weaknesses (biases; poorly controlled threats to internal/external validity)                                                                                                                                                                                                                                                                                                                                 | LEVEL OF EVIDENCE - using JHNEBP tool (Strength and Quality) |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|
| Stanley et al. 2018    | To examine the effects of a safety plan intervention and follow-up phone calls on suicidal behaviors in the 6 months after intervention.                     | Hypothesis: SPI and follow-up phone calls would reduce suicidal behavior reports and greater engagement in treatment                                                                                             | Clinical demonstration project. Studied patients from 5 VA hospitals where SPI+ was being done in a systematic manner, and compared outcomes to patients at 4 other VA hospitals that did not systematically do a safety plan. | 1640 patients. 1186 in the intervention and 454 in the control group                                                                                                                                         | Convenience sample taken from 9 VA hospitals where 5 used the SPI and 4 did not. Incl criteria: 18years +, speaks English, initial ED visit for suicide related issue, inpatient hospitalization not clinically indicated. | IV: SPI+ as defined by doing a 6 step SPI and 2 standardized follow-up phone calls the TAU control was less standardized and varied by location, but did not include an SPI or follow-up phone calls. | DV: Suicide attempts, suicide deaths, or interrupted suicides | t-tests for quantifiable data and person X2 for categorical measures. Used a cutoff of $\alpha=0.05$                                                                                                            | SPI+ was associated with 45% fewer suicidal behaviors in the 6 months following the ED visit as compared to the other patients receiving TAU. These findings were not skewed by the patients receiving follow-up calls being more likely to attend their follow-up appointments.                                                                                                                | The large difference in outcomes suggests that although the samples were not randomized, there is still validity. Internal validity was controlled for, so that factors such as follow-up care did not confound the results. External validity was demonstrated through the intervention sites having similar outcomes. | The groups were not randomized, and the resulting groups had some differences in them. It was not known if the patients in the control group had previously completed safety plans. Some suicidal behavior may not have been reported/charted. As this study was conducted at VA sites, with 88% of the participants being male, it is difficult to assess the external validity for women and non-veterans. | IIB Quasi-experimental                                       |
| Moscardini et al. 2020 | To gather data on the training that providers have on safety planning, their comfort using a safety plan, and the circumstances where safety plans are used. | Hypothesis: greater use of safety planning is related to overall provider exposure to suicide, more comfort with safety plans, more training in safety plans, and having an institutional policy on safety plans | Non-experimental descriptive survey to determine correlations impacting the use of safety plans.                                                                                                                               | 119 BH providers, age ranging from 24-71, education ranging from associates degree to doctoral degree (40.9% doctoral, 47.3% masters) self-identified as having experience in safety planning with patients. | Convenience sample recruited from email listserv members and word of mouth. Inclusion criteria: age 18+, self reported experience with safety planning                                                                     | IV: Provider exposure to suicide, comfort with safety planning, training in safety plans, institutional policy on safety plan                                                                         | DV: Frequency of safety plan usage                            | t-tests for correlation between frequency of safety plan use and independent variables. X2 tests were used when the independent variables were nominal (i.e.; if the provider had personal exposure to suicide) | While most respondents considered themselves to be extremely comfortable (43.7%) or somewhat comfortable (45.4%) with safety plans, 68.1% indicated a desire for more training. Safety plans were reported to take an average of 24.7 minutes to complete. Only 11% of respondents do a safety plan with every patient. Working in a place where safety plans are mandated increases their use. | The survey method obtained a substantial amount of data about the use of safety planning, and demonstrated that more training is desired and that mandated safety planning can be effective. The study designers gathered interesting perspectives, which can shape future research and implementation.                 | There was no randomization of survey respondents, and no attempt was made to ensure that these are representative of a broader selection of practitioners. A self-selection bias is likely. Those who responded were primarily social workers and psychologists, which is not representative of the many disciplines that complete safety plans.                                                             | IIIC                                                         |

|                     |                                                                                               |                                                                                                       |                                                                                                                                                                                                                                      |                                                   |                                                                                                                                                                                                |                                                              |                                                                                                                                                                                                                                  |                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                 |      |
|---------------------|-----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| Zoana et al., 2018  | To evaluate the impact of safety plans on patient care at an outpatient mental health clinic. | None specified                                                                                        | Non-randomized, retrospective chart review of the following: patient visits 6 months pre/post implementation of a safety plan, significant pt events                                                                                 | 48 patient charts reviewed                        | All charts were reviewed for a safety plan. Inclusion criteria were outpatients w/ safety plan documents enrolled in the clinic 6 months before and 6 months after creation of the safety plan | Safety plan implementation on which was the standard of care | Patient visits, missed appointments, median # of psychiatric ED visits, suicide attempts, completed suicides, episodes of violence, psychiatric hospital admissions, inpatient hospital days, transfer to a higher level of care | Descriptive statistics, paired <i>t</i> -test or Wilcoxon signed-rank test                                                      | Hospitalizations were significantly reduced and use of crisis calls significantly increased after implementation of safety plans. 5 suicide attempts prior to safety plan completion and 1 after. Outpatient encounters increased by 18%, missed appointments increased by 34%, psychiatric emergency room visits decreased by 47%, 69% reduction in inpatient hospital days were observed. No difference in episodes of violence or self-injurious behavior. | First study looking at outcomes before and after safety planning as the sole intervention in an outpatient setting                                                                                                                                                                                                                  | Study sample was small and there was a lack of randomization, two separate groups were not followed (with/without safety plan). Diagnostic categories not equally represented in the sample. Since study was not sufficiently powered, safety planning effects on suicide rates, suicide attempts, self-injurious behaviors, and violence could not be revealed | IIIB |
| Louzon et al., 2016 | To measure the predictive ability of question 9 of the PHQ-9 related to suicide in veterans   | They hypothesized that higher scores on question 9 would be associated with a higher risk for suicide | Non-experimental Retrospective record review of VA medical records, as part of an ongoing VA program evaluation. Analysis of PHQ-9 scores in 2010 were then compared to cause of death (if deceased, as listed in ICD code) in 2011. | 447 245 PHQ-9 tests representing 391 492 patients | Population of VA medical records for the year were used. All VA users who had a PHQ-9 in 2010 were included.                                                                                   | The score of question 9 of the PHQ-9                         | Rate of suicide, as noted in charts by ICD-10 codes X60-X84 and Y87.0                                                                                                                                                            | SAS 9.3 and SAS Enterprise Guide 6.1 software was used. X2 tests were used to test the differences in patients to suicide risk. | Patients who scored higher on PHQ-9 Question 9 were more likely to die by suicide. 7.4% of suicided patients had marked that they had daily thoughts of suicide, while 2.3% of non-suicided patients marked the same scores. However, 71.6% of suicided patients responded "not at all" to that question.                                                                                                                                                     | This was the first study to replicate suicide mortality analysis in the VA. It had a very large sample size and access to a comprehensive chart review. It controlled for non-suicide mortality, age, sex, psychiatric diagnosis, inpatient/outpatient encounters. It also compared VA suicides who did not have a PHQ-9 completed. | Findings may not be generalizable because suicide rate was higher among those that had a PHQ-9 score when compared to those who did not. Study participants were 92.7% male and 75.9% were at least 50 years old, so it may not be generalizable to the general public, or the active duty population.                                                          | IIIA |

|                     |                                                                                                                                                     |                                                                                                                                                                                                                                                                              |                                                                                                                                                         |                                            |                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                          |                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                             |                                                                                                                                                                                     |    |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| Bryan et al., 2017  | To evaluate the effectiveness of crisis response planning for the prevention of suicide attempts                                                    | 1. Crisis response planning would be significantly better than the contract for safety in reducing suicide attempts and suicide ideation. 2. Enhanced crisis response plan would be significantly better than the standard crisis response plan and the contract for safety. | Randomized clinical trial                                                                                                                               | N=97 active duty Army personnel aged 19-53 | Active duty Army soldiers at Fort Carson, Colorado presenting for an emergency behavioral health appointment were referred to a research therapist if they reported recent suicidal ideation and/or lifetime history of suicide attempt on clinic paperwork. Beck Scale for Suicide Ideation was then used to determine eligibility | Patients were randomly assigned to receive either a contract for safety, standard crisis response plan, or enhanced crisis response plan | Occurance of suicide attempts during the follow-up period (assessed with the Suicide Attempt Self-Injury Interview). | Primary analysis focused on the effect of the treatment group on suicide attempt rates, severity of suicide ideation, and mental health care utilization during follow-up. Estimated proportions of patients in each treatment group who attempted suicide during follow-up were calculated w/the Kaplan-Meier method. The log-rank statistic was used for the test of differences in suicide attempt rates. Hazard ratios were calculated w/the Cox proportional hazards model. For suicide ideation, longitudinal generalized mixed models for Poisson and negative binomial distributions with a variance components covariance matrix were used. Post-hoc pairwise contrasts were used to eval between-group differences. For post-intervention mental health utilization, generalized linear models for Poisson distributions were used. | Crisis response planning was associated with significantly faster decline in suicide ideation and fewer inpatient hospitalization days. There were no differences between the enhanced and standard crisis response plan conditions. Overall, crisis response planning was more effective than a contract for safety in preventing suicide attempts, resolving suicide ideation, and reducing inpatient hospitalization among high-risk soldiers. | Randomized, double blind                                                                    | Small sample size, limited generalizability beyond active duty Army personnel, only involved participants in the healthcare system.                                                 | IB |
| Chesin et al., 2016 | To summarize staff perceptions of the acceptability and utility of the safety planning and structured post-discharge follow-up contact intervention | None specified                                                                                                                                                                                                                                                               | Qualitative-standardized, semi-structured, one-on-one interviews were conducted in-person with open ended questions (questionnaire was used as a guide) | 50 staff members                           | Purposive sampling                                                                                                                                                                                                                                                                                                                  | Standard of care                                                                                                                         | Staff perceptions                                                                                                    | All interviews were transcribed by study staff and then coded and summarized using codes developed by study investigators and thematic analysis. Coders demonstrated good inter-rater reliability. Descriptive statistics of coded qualitative and rating-scale item data were computed using SAS software.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Staff members found safety planning and structured post-discharge follow-up to be an acceptable intervention and almost all staff reporting they were satisfied                                                                                                                                                                                                                                                                                   | Methods provided rich and diverse information about clinical and administrative staff views | Small sample size, semi-structured interview limits the objectivity and reliability, answers may have been biased since respondents were selected for familiarity with intervention | IV |

|                        |                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                     |                                                                                                    |                                                                    |                                                                                                                                                                                                              |                                                                                 |                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                |      |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| Gamarra et al., 2015   | Aims: This study aimed to explore the implementation fidelity of safety planning and associations between safety plan quality and completeness with patient outcomes | 1) Hypothesized an inconsistency of safety plan fidelity would also exist as indicated by loyalty to the steps of the safety plan completeness and quality. 2) Hypothesized that more complete safety plans with higher quality responses would be connected with more favorable clinical outcomes. | Cross-sectional chart review was conducted for patients who were flagged as high risk for suicide. | N=180 high risk veterans, Gender=87% male M(SD), Age=51(15) yr     | This study included purposive sampling of 180 veterans identified in the VHA Suicide Prevention and Application Network (SPAN) database who were flagged as high risk for suicide within the last 12 months. | Safety plan completeness and quality                                            | -Attempts<br>- Hospitalizations<br>- Outpatient attendance<br>- Safety plan completeness and quality                                                                                                                                   | Descriptive statistics were calculated to describe sample characteristics, assess safety plan fidelity, and determine the presence or absence of specific provider-patient collaboration and follow-up variables. Intra-rater correlations were calculated for safety plan completeness and quality scores. Six logistic regression analyses were performed, analyzing total completeness and total quality as individual predictors of three outcomes: subsequent suicide attempt, subsequent psychiatric hospitalization, and attending four or more outpatient mental health visits. | A significant association was found between total quality and subsequent hospitalization (OR =.88, 95% CI= .80-.97), suggesting that higher quality safety planning decreased the likelihood of future hospitalization. Surprisingly, total completeness was not associated with patient outcomes.                                                                                                                                                                                                                                                                                           | Rater agreement for fidelity variables was high (completeness ICC = .994; quality ICC = .948). The methods of the study were clearly discussed. These cases were also reviewed and discussed as necessary so as to maintain rating consistency.                       | This study was limited by the small small size. The study may be limited by method of chart assessment, although. Certain variables, such as education level and socioeconomic status, were not discernible from patient charts, while others were not systematically documented in notes, thus potentially providing inconsistent information.                                | IIIB |
| Boudreaux et al., 2017 | The aim of this study was to design, build, and test the usability of a Web-based, self-administered safety planning application.                                    | None specified                                                                                                                                                                                                                                                                                      | Quasi-experimental (one group, pre/post-test                                                       | N=30 adult suicidal patients, Gender=47% male M(SD), Age=39(14) yr | Convenience samples of adult patients being evaluated for an acute psychiatric emergency in either the ED or inpatient psychiatric unit were screened during research assistant (RA) shifts.                 | The application tested for usability with a target sample of suicidal patients. | Usability ratings were generally strong, and all patients successfully built a safety plan. However, the completeness of the safety plan varied - Ideation intensity and perceived ability to cope with ideation - Number of ed visits | Analyses included paired sample t test comparing suicidal ideation intensity and ability to cope with suicidal ideation pre-post safety plan administrations well as a paired sample t test comparing suicide-related acute health care visits in the one month before and after the index visit. Statistical Package for the Social Sciences 22 (IBM, Armonk, NY) was used for all analyses.                                                                                                                                                                                           | 80% (24/30) of the participants agreed that they would use their safety plan in the future if they experienced suicidal ideation. Ratings of suicide intensity after completion of the application were significantly lower than pre-ratings, pre: mean 5.11 (SD 2.9) versus post: mean 4.46 (SD 3.0), $t_{27}=2.49$ , $P=.02$ . Ratings of ability to cope with suicidal thoughts after completion of the application were higher than pre-ratings, with the difference approaching statistical significance, pre: mean 5.93 (SD 2.9), post: mean 6.64 (SD 2.4), $t_{27}=-2.03$ , $P=.05$ . | Two aspects of suicidal ideation were measured immediately before and after engagement with the application: suicidal ideation intensity (0=none, 10=constant) and perceived ability to cope with suicidal ideation (0=no ability to cope, 10=strong ability to cope) | One limitation of the study is the sample size and may not represent all suicidal patients. Safety Planning application is subject to the limitations inherent in a Web-based platform; The study only tested usability, so it did not follow patients prospectively or have a control condition against to compare the application's impact on suicidal ideation or behavior. | IIC  |

|                    |                                                                                                                                                                                                                                                                                    |                                                                                                                                                       |                 |                                                                          |                                                                                                                                                                                    |                                                                                                                               |                                                                                                                                                                       |                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |      |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| Green et al., 2018 | Examine if more personally relevant (i.e., higher quality) SPs decrease future suicide-related outcomes (psychiatric hospitalization, self-harm, and suicide attempts), and the second goal is find out which components of a SP may be most effective at reducing these outcomes. | Hypothesized that more personally relevant items on Step 6 (lethal means restriction) would be associated with fewer future suicide-related outcomes. | Cross-sectional | N=68 veterans with suicidality<br>Gender=54% female M(SD), Age =36(9) yr | Convenience sample of Operation Enduring Freedom and/or Operation Iraqi Freedom (OEF/OIF) veterans enrolled in the Veterans After Discharge Longitudinal Registry (Project VALOR), | Suicide-related charts were reviewed after the completion of an Safety Plan. Risk Assessment is another independent variable. | - Suicide risk (MINI)<br>- Suicide-related outcomes (attempt, death, behavior)<br>- Outpatient psychiatric hospitalizations<br>- Safety plan quality and completeness | Analyses were completed using SPSS 24.0 They ran zero-order correlations and chi-squares to determine whether characteristics and history of suicide attempts were related to independent (RAs, SP scores) or dependent (suicide-related outcomes) variables. | SP completion, quality, and total scores did not predict psychiatric hospitalizations or suicide attempts. However, higher SP scores (AOR = .90) and total scores (AOR = .84) suggest decreased suicidal behavior in the future. Surprisingly, item 3 of the SP predicted decreased behavior, but no other item predicted suicidal outcomes. It is essential to read the limitations of the study to take these results into account. | Regression Analyses were used to control the independent and dependent variables; for the Safety plan, binary logistic regression was used to compare the safety plan score to predict future suicide-related outcomes. To determine which steps of an SP were most effective at reducing suicide-related results, they entered total scores for each of the six steps (e.g., Step 1 quality subtracted from Step 1 completeness) into a binary logistic regression. The time between SP completion and time of chart review (Mdays = 1581.87, SDdays = 572.33) controlled for the time between these events. | The study needed more power. The most distributed dependent variable (psychiatric hospitalizations, 53.7% admitted), an additional 44 participants would have been needed for analyses to be appropriately powered. Study data are based largely on information available in VA databases. There is a possibility that care of veterans happened in another hospital. The coding scheme used in this study could also benefit from additional expert review and validation. That participants were a convenience sample drawn from a PTSD registry composed of OEF/OIF veterans may limit the generalizability of findings. The present study is limited in its ability to examine cause-effect relations between SPs and suicide-related outcomes | IIIC |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|

## Appendix C

**Figure C. Business Case Analysis**

|                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><u>Problem</u></p> <ul style="list-style-type: none"> <li>-Suicide is the second leading cause of death in individuals aged 15-34.</li> <li>-In 2021, the Department of Defense reported 580 suicides in the military.</li> </ul>                                                                                                                                                             | <p><u>Solution</u></p> <ul style="list-style-type: none"> <li>-Per literature review, implementing a Safety Plan Intervention (SPI) could reduce suicide attempts by 76% among active duty soldiers who initially presented to an emergency behavioral health appointment.</li> </ul> |
| <p><u>Approach</u></p> <ul style="list-style-type: none"> <li>-Implement and evaluate a staff educational intervention that aims to standardize and enhance adherence to the SPI and evaluate linkages between provider SPI adherence and patient outcomes (as measured by suicidality frequency on question nine of the PHQ-9 and suicide-related admissions over a 90 day duration)</li> </ul> | <p><u>Overall Impact of the Solution (Business Impact)</u></p> <ul style="list-style-type: none"> <li>-By enhancing the standardized utilization of the VA/DoD CPG, patient encounters can be optimized with the SPI to improve suicide-related outcomes.</li> </ul>                  |

## Appendix D

**Figure D.** Safety Plan Intervention Provider Knowledge Assessment

**1) The Safety Plan should be completed by the patient without provider assistance.**

T                      F

**2) Once the patient feels relief from the crisis, they should continue to the next step of their Safety Plan.**

T                      F

**3) In section three: people and social settings that can provide distraction:**

- A: The patient should brief these people on the patient's situation before the Safety Plan is implemented
- B: The answers should be assessed by the provider for safety, feasibility and barriers
- C: The embedded behavioral health clinic should always be listed as a place to go
- D: Patient should be encouraged to include locations from their home towns that provide comfort

**4) Section 6: Making the Environment Safe, should include which of the following:**

- A: Changing batteries on smoke detectors twice a year
- B: Asking a friend to hold onto firearms until patient is more stable
- C: Asking the resistant patient what the pros and cons are of keeping lethal means accessible, and attempting to compromise with the patient
- D: B and C

**5) When creating a Safety Plan, it can be helpful to:**

- A: Create a comprehensive list of patient's past treatment failures
- B: Focus on best case scenarios
- C: Review a prior crisis and the strategies that were used at that time
- D: Include unhealthy coping strategies, because they are partially helpful

**6) SPIs create a written list that includes prioritizing use of the emergency department during a crisis.**

T                      F

**7) SPIs start with actions that involve help from other people.**

T                      F

**8) The best skills to include in the Safety Plan are:**

- A: Complex and detailed
- B: Novel and cutting edge
- C: Easy and simple
- D: New to the patient, and untested in crisis

**9) Teaching patients that crises are time limited and have solutions is best accomplished by:**

- A: Gently reassuring the patient that these are time limited events and they will get through it
- B: Showing the patient the most recent literature that supports this idea
- C: Firmly and loudly telling the patient "THIS TOO WILL PASS!"
- D: Reviewing recent crises that the patient has experienced

**10) Which of the following is correct about SPI research findings:**

- A: Robust SPIs reduce suicidal behavior by 65%
- B: 85% of all providers surveyed consider themselves to be extremely comfortable with safety plans
- C: Robust SPIs reduced psychiatric ER visits by 47%
- D: 42% of providers expressed a desire for more training

**Optional: What is your biggest perceived barrier to doing a comprehensive safety plan?**

- A: Time
- B: Continuity of care
- C: Patient engagement
- D: Knowledge

## Appendix E

**Figure E. Timeline of Events**

[illegible]

## Appendix F

**Figure F.** Organizing Framework and Steps

|                | <b>Stage in Iowa Model</b>                                                                               | <b>Project Action</b>                                                                                                                                                             |
|----------------|----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Phase 1</b> | Assess need for change in practice                                                                       | Reducing suicide among the military has been identified as an executive branch priority (White House, 2021). PICOT questions, literature search strategy, and evidence evaluation |
| <b>Phase 2</b> | Gathering, analyzing, and synthesizing evidence to support our project-based solution                    | Literature review & table creation, evidence for solution organized                                                                                                               |
| <b>Phase 3</b> | Describing project design, training guides, local leadership involvement, and IRB and command approvals. | Solidifying project design, provider education presentation, & appropriate approvals                                                                                              |
| <b>Phase 4</b> | Training providers and leadership, implementing safety plans, collecting and analyzing data              | Implementation of SPI education for providers                                                                                                                                     |
| <b>Phase 5</b> | Results dissemination and project sustainability                                                         | Leadership briefings, recommendations for sustainability                                                                                                                          |

## Appendix G

## Appendix G. John Hopkin Research Evidence Appraisal Tool

### Johns Hopkins Nursing Evidence-Based Practice Research Evidence Appraisal Tool

Evidence Level and Quality: \_\_\_\_\_

|                                                                                                                                                                                                                                                                                                                                                                                                                 |                              |                                                                                                                                          |                                                                                                                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Article Title:                                                                                                                                                                                                                                                                                                                                                                                                  |                              | Number:                                                                                                                                  |                                                                                                                                      |
| Author(s):                                                                                                                                                                                                                                                                                                                                                                                                      |                              | Publication Date:                                                                                                                        |                                                                                                                                      |
| Journal:                                                                                                                                                                                                                                                                                                                                                                                                        |                              |                                                                                                                                          |                                                                                                                                      |
| Setting:                                                                                                                                                                                                                                                                                                                                                                                                        |                              | Sample<br>(Composition & size):                                                                                                          |                                                                                                                                      |
| Does this evidence address my EBP question?                                                                                                                                                                                                                                                                                                                                                                     | <input type="checkbox"/> Yes | <input type="checkbox"/> No<br>Do not proceed with appraisal of this evidence                                                            |                                                                                                                                      |
| <b>Level of Evidence (Study Design)</b>                                                                                                                                                                                                                                                                                                                                                                         |                              |                                                                                                                                          |                                                                                                                                      |
| A. Is this a report of a single research study? <i>If No, go to B.</i><br><br>1. Was there manipulation of an independent variable?<br>2. Was there a control group?<br>3. Were study participants randomly assigned to the intervention and control groups?                                                                                                                                                    |                              | <input type="checkbox"/> Yes<br><br><input type="checkbox"/> Yes<br><br><input type="checkbox"/> Yes<br><br><input type="checkbox"/> Yes | <input type="checkbox"/> No<br><br><input type="checkbox"/> No<br><br><input type="checkbox"/> No<br><br><input type="checkbox"/> No |
| <b>If Yes to all three, this is a Randomized Controlled Trial (RCT) or Experimental Study</b>                                                                                                                                                                                                                                                                                                                   |                              | →                                                                                                                                        | <input type="checkbox"/> LEVEL I                                                                                                     |
| <b>If Yes to #1 and #2 and No to #3, OR Yes to #1 and No to #2 and #3, this is Quasi Experimental</b> (some degree of investigator control, some manipulation of an independent variable, lacks random assignment to groups, may have a control group)                                                                                                                                                          |                              | →                                                                                                                                        | <input type="checkbox"/> LEVEL II                                                                                                    |
| <b>If No to #1, #2, and #3, this is Non-Experimental</b> (no manipulation of independent variable, can be descriptive, comparative, or correlational, often uses secondary data) <b>or Qualitative</b> (exploratory in nature such as interviews or focus groups, a starting point for studies for which little research currently exists, has small sample sizes, may use results to design empirical studies) |                              | →                                                                                                                                        | <input type="checkbox"/> LEVEL III                                                                                                   |
| <b>NEXT, COMPLETE THE BOTTOM SECTION ON THE FOLLOWING PAGE, "STUDY FINDINGS THAT HELP YOU ANSWER THE EBP QUESTION"</b>                                                                                                                                                                                                                                                                                          |                              |                                                                                                                                          |                                                                                                                                      |

**Johns Hopkins Nursing Evidence-Based Practice  
Appendix E: Research Evidence Appraisal Tool**

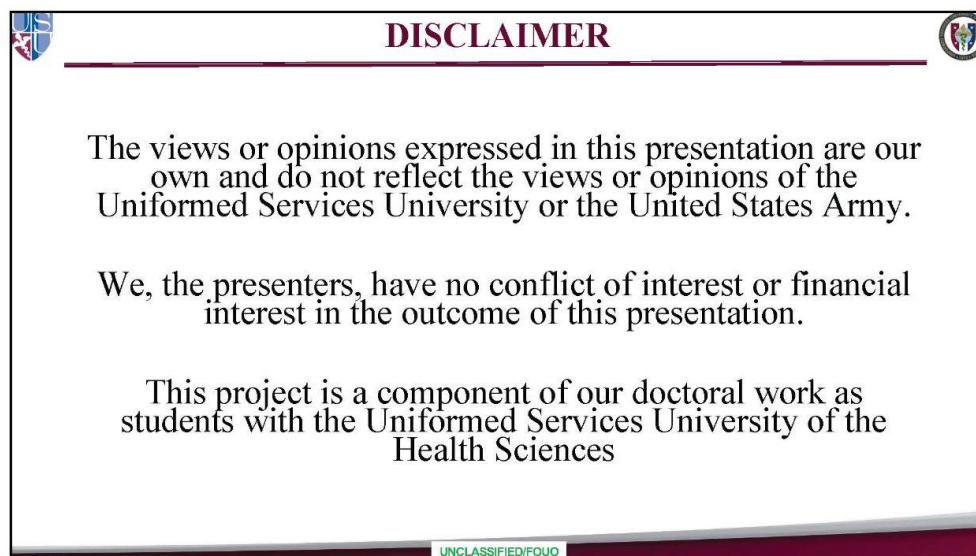
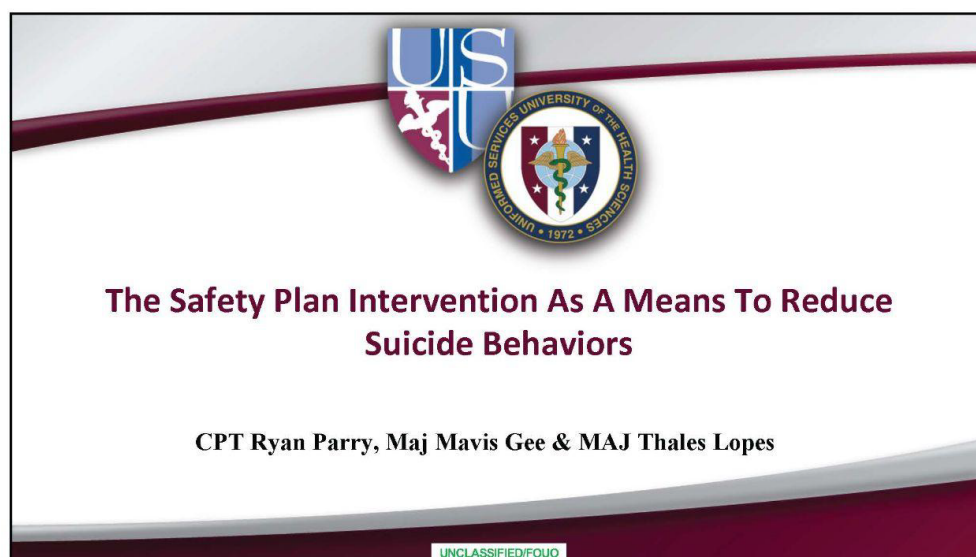
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |                                                                                                                                          |                                                                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| <p>B. Is this a summary of multiple research studies? <i>If No, go to Non-Research Evidence Appraisal Form.</i></p> <p>1. Does it employ a comprehensive search strategy and rigorous appraisal method (<b>Systematic Review</b>)? <i>If No, use Non-Research Evidence Appraisal Tool; if Yes:</i></p> <p>a. Does it combine and analyze results from the studies to generate a new statistic (effect size)? (<b>Systematic review with meta-analysis</b>)</p> <p>b. Does it analyze and synthesize concepts from qualitative studies? (<b>Systematic review with meta-synthesis</b>)</p> <p><i>If Yes to either a or b, go to #2B below.</i></p> <p>2. For Systematic Reviews and Systematic Reviews with meta-analysis or meta-synthesis:</p> <p>a. Are all studies included RCTs? →</p> <p>b. Are the studies a combination of RCTs and quasi-experimental or quasi-experimental only? →</p> <p>c. Are the studies a combination of RCTs, quasi-experimental and non-experimental or non-experimental only? →</p> <p>d. Are any or all of the included studies qualitative? →</p> |  | <input type="checkbox"/> Yes<br><br><input type="checkbox"/> Yes<br><br><input type="checkbox"/> Yes<br><br><input type="checkbox"/> Yes | <input type="checkbox"/> No<br><br><input type="checkbox"/> No<br><br><input type="checkbox"/> No<br><br><input type="checkbox"/> No |
| <p><b>COMPLETE THE NEXT SECTION, “STUDY FINDINGS THAT HELP YOU ANSWER THE EBP QUESTION”</b></p> <p><b>STUDY FINDINGS THAT HELP YOU ANSWER THE EBP QUESTION:</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |                                                                                                                                          |                                                                                                                                      |
| <p><b>NOW COMPLETE THE FOLLOWING PAGE, “QUALITY APPRAISAL OF RESEARCH STUDIES”, AND ASSIGN A QUALITY SCORE TO YOUR ARTICLE</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |                                                                                                                                          |                                                                                                                                      |

© The Johns Hopkins Hospital/Johns Hopkins University. May not be used or reprinted without permission.

## Appendix H

## Appendix H. Safety Plan Intervention Training Slides

3/29/23



3/29/23



## Introduction

Suicide is a problem in the civilian and military sectors

*Department of Defense Clinical Practice Guideline for the Assessment and Management for Patients at Risk for Suicide (2019)* has guidelines to help reduce suicide.

Safety Plan Implementation (SPI) is an effective way to deal with patients who present with a risk for suicide

UNCLASSIFIED//FOUO

3



## Why is This Important?

47,500 suicides in the United States in 2019 (Stone, et al, 2021)

498 suicides reported in the Department of Defense in the same year (Department of Defense, 2020)

Suicide is the second leading cause of death in the military (Department of Defense, 2020)

The suicide rate is 25.9 suicide deaths per 100,000 service members (Department of Defense, 2020)

UNCLASSIFIED//FOUO

4

3/29/23

| Solution Synthesis     |                                                   |                                                                                                                               |                                                                                                                                         |                          |
|------------------------|---------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Study authors          | Total Sample Size                                 | Sampling Plan                                                                                                                 | Results                                                                                                                                 | LEVEL OF EVIDENCE JHNEBP |
| Stanley et al. 2018    | 1640 patients.                                    | Convenience sample                                                                                                            | SPI+ was associated with 45% fewer suicidal behaviors compared to TAU                                                                   | IIB Quasi-experimental   |
| Moscardini et al. 2020 | 119 BH providers                                  | Convenience sample                                                                                                            | BP provider( 68.1%) indicated a desire for more training on SPI.                                                                        | IIIC                     |
| Zoana et al., 2018     | 48 patient charts reviewed                        | All charts were reviewed for a safety plan.                                                                                   | SPI associated with decrease in hospitalizations                                                                                        | IIIB                     |
| Louzon et al., 2016    | 447 245 PHQ-9 tests representing 391 492 patients | All VA users who had a PHQ-9 in 2010 were included.                                                                           | Patients who scored higher on pHQ-9 Question 9 were more likely to die by suicide.                                                      | IIIA                     |
| Bryan et al., 2017     | N=97 active duty                                  | PT referred to a research if they reported recent suicidal ideation. Beck Scale for Suicide Ideation to determine eligibility | Crisis response planning was associated with significantly faster decline in suicide ideation and fewer inpatient hospitalization days. | IB                       |
| Chesin et al., 2016    | 50 staff members                                  | Purposive sampling                                                                                                            | Staff members found safety planning to be an acceptable intervention                                                                    | IV                       |
| Gamarra et al., 2015   | N=180 high risk veterans                          | Purposive sampling of 180 veterans                                                                                            | Suggesting that higher quality safety planning decreased the likelihood of future hospitalization.                                      | IIIB                     |
| Boudreaux et al., 2017 | N=30 adult suicidal patients                      | Convenience sample                                                                                                            | 80% of the PT reported to use SPI                                                                                                       | IIC                      |
| Green et al., 2018     | N=68 veterans with suicidality                    | Convenience sample                                                                                                            | Higher SP suggest decreased suicidal behavior in the future.                                                                            | IIIC                     |

UNCLASSIFIED//FOUO

5

| The Safety Plan                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>SAFETY PLAN: VA VERSION</b></p> <p><b>Step 1: Warning signs:</b></p> <p>1. _____</p> <p>2. _____</p> <p>3. _____</p> <p><b>Step 2: Internal coping strategies - Things I can do to take my mind off my problems without contacting another person:</b></p> <p>1. _____</p> <p>2. _____</p> <p>3. _____</p> <p><b>Step 3: People and social settings that provide distraction:</b></p> <p>1. Name: _____ Phone: _____</p> <p>2. Name: _____ Phone: _____</p> <p>3. Place: _____ 4. Place: _____</p> <p><b>Step 4: People whom I can ask for help:</b></p> <p>1. Name: _____ Phone: _____</p> <p>2. Name: _____ Phone: _____</p> <p>3. Name: _____ Phone: _____</p> <p><b>Step 5: Professionals or agencies I can contact during a crisis:</b></p> <p>1. Clinician Name: _____ Phone: _____</p> <p>2. Clinician Pager or Emergency Contact #: _____ Phone: _____</p> <p>3. Clinician Pager or Emergency Contact #: _____ Phone: _____</p> <p>4. Local Urgent Care Services: _____</p> <p>Urgent Care Services Address: _____</p> <p>Urgent Care Services Phone: _____</p> <p>5. VA Suicide Prevention Resource Coordinator Name: _____</p> <p>VA Suicide Prevention Resource Coordinator Phone: _____</p> <p>6. VA Suicide Prevention Hotline Phone: 1-800-273-TALK (8255), push 1 to reach a VA mental health clinician</p> <p><b>Step 6: Making the environment safe:</b></p> <p>1. _____</p> <p>2. _____</p> <p><small>Safety Plan Treatment Manual to Reduce Suicide Risk: Veteran Version (Stanley &amp; Brown, 2008)</small></p> | <ul style="list-style-type: none"> <li>• SPIs show a stepped approach to dealing with crises.</li> <li>• They start with actions that the patient can do themselves, and then expand to include others.</li> <li>• Creating a safety plan and rehearsing it allows for the patient to prepare for future crises. <i>(Stanley &amp; Brown, 2019)</i></li> </ul> |

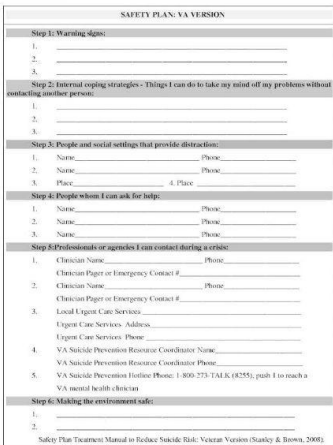
UNCLASSIFIED//FOUO

6

3

3/29/23

## The Safety Plan



- 1. Recognizing **warning signs**
- 2. Employing **internal coping strategies** (without contacting another person)
- 3. **Socializing** with others as a way of distraction
- 4. **Contacting** family members or friends to help resolve crisis
- 5. Contacting **mental health professionals/agencies**
- 6. Reducing potential for use of **lethal means**

UNCLASSIFIED//FOUO

7

## The Safety Plan

- It helps to start by having the patient review a recent crisis
- If some steps aren't helpful, then move on to the next step
- Once relief from crisis is achieved, more steps are not required
- Explain when to jump to getting more help

(Stanley & Brown, 2019)

UNCLASSIFIED//FOUO

8

3/29/23



## Section 1: Warning Signs



- Warning signs that preceded the crisis
- Early detection leads to early intervention
- Try to be as specific as possible
- Signs can be physical, emotional, behavioral, cognitive, or situational
- Explore previous crises for clues

(Stanley & Brown, 2019)

UNCLASSIFIED//FOUO

9



## Section 2: Internal Coping Skills



Allow the person to take their mind off the crisis and redirect their attention

The best skills are easy and simple

What have they used in the past?

What are some barriers might, and how they can be overcome?

Provide suggestions

(Stanley & Brown, 2019)

UNCLASSIFIED//FOUO

10

3/29/23



### Section 3: People and Social Settings that Provide Distraction



If Step 2 is not working, move on to Step 3

Who can you call or visit to take your mind off your problems for while?

Where can you go that helps you feel better?

Where can you go where you would be around other people and not alone?

Is going there likely? Feasible? Safe?

What are some roadblocks to this and how can they be overcome?

*(Stanley & Brown, 2019)*

UNCLASSIFIED//FOUO

11



### Section 4: People Whom I Can Ask For Help



If Step 3 is not working, move on to Step 4

Calling close friends or family members

“Among your friends and family, who could you contact to help you get through a difficult time?”

“Who can you reach out to when you are feeling suicidal or under a lot of stress?”

Explain the difference between people from Step 3 (distractors) from Step 4 (people who can help to resolve the crisis)

What are some roadblocks to this and how can they be overcome?

*(Stanley & Brown, 2019)*

UNCLASSIFIED//FOUO

12

3/29/23



### Section 5: Identify Professionals and Agencies

If Step 4 is not working, move on to Step 5

Professionals or community workers that they can call

During the duty day vs. after hours help?

Phone numbers/hotlines

What are some roadblocks to this and how can they be overcome?

*(Stanley & Brown, 2019)*

UNCLASSIFIED//FOUO

13



### Section 6: Making the Environment Safe

This is in conjunction with all the other steps

Patient plan?

Access to means?

Pros and cons of maintaining lethal means

What are some compromises to keeping them?

Who can be involved in helping to make the environment safer?

*(Stanley & Brown, 2019)*

UNCLASSIFIED//FOUO

14

3/29/23



## Additional Resources

*Department of Defense Clinical Practice Guideline for the Assessment and Management for Patients at Risk for Suicide (2019)*

Stanley-Brown Safety Plan Intervention

<https://suicidesafetyplan.com/>

UNCLASSIFIED//FOUO

15



## Summary

- SPIs are effective at reducing suicide behaviors and hospital admissions
- Use a patient's previous crisis when teaching about safety plans
- Use frequent checks with the patient on obstacles/roadblocks
- Review the safety plan on a regular basis and after a crisis

UNCLASSIFIED//FOUO

16

3/29/23

**References**

Boudreaux, E. D., Brown, G. K., Stanley, B., Sadasivam, R. S., Camargo, C. A., & Miller, I. W. (2017). Computer administered safety planning for individuals at risk for suicide: Development and usability testing. *Journal of Medical Internet Research*, 19(5), e149. <https://doi.org/10.2196/jmir.6816>

Bryan, C. J., Mintz, J., Clemons, T. A., Leeson, B., Burch, T. S., Williams, S. R., Maney, E., & Rudd, M. D. (2017). Effect of crisis response planning vs. contracts for safety on suicide risk in U.S. Army Soldiers: A randomized clinical trial. *Journal of affective disorders*, 212, 64–72. <https://doi.org/10.1016/j.jad.2017.01.028>

Cerel, J., Brown, M. M., Maple, M., Singleton, M., van de Venne, J., Moore, M., & Flaherty, C. (2019). How many people are exposed to suicide? Not six. *Suicide & life-threatening behavior*, 49(2), 529–534. <https://doi.org/10.1111/sltb.12450>

Chasin, M. S., Stanley, B., Haigh, E. P., Chaudhury, S. R., Pontoski, K., Knox, K. L., & Brown, G. K. (2016). Staff views of an emergency department intervention using safety planning and structured follow-up with suicidal veterans. *Archives of Suicide Research*, 21(1), 127–137. <https://doi.org/10.1080/13811118.2016.1164642>

Defense Health Agency. (2021). *The calendar year 2019 DoDSER annual report*. Psychological Health Center of Excellence Research and Development Directorate, Defense Health Agency. [https://www.rdhealth.mil/sites/default/files/images/docs/TAB\\_B\\_2018\\_DoDSER\\_Annual\\_Report-508%20final-9MAR2020.pdf](https://www.rdhealth.mil/sites/default/files/images/docs/TAB_B_2018_DoDSER_Annual_Report-508%20final-9MAR2020.pdf)

Department of Defense. (2020). *Annual Suicide Report Calendar Year 2019*. [https://www.dspo.mil/Portals/113/Documents/CY2019%20Suicide%20Report\\_DoD%20Calendar%20Year%20CY%202019%20Annual%20Suicide%20Report.pdf?ver=YOAIIZVcVA9mzwtsGIC5EY%3d%3d](https://www.dspo.mil/Portals/113/Documents/CY2019%20Suicide%20Report_DoD%20Calendar%20Year%20CY%202019%20Annual%20Suicide%20Report.pdf?ver=YOAIIZVcVA9mzwtsGIC5EY%3d%3d)

Department of Veterans Affairs, Department of Defense. (2019). *VA/DoD clinical practice guideline for the assessment and management of patients at risk for suicide*. <https://www.health.mil/va.gov/andclines/MH/srb/VA/DoD/SuicideRiskFullCPGFinal5088212019.pdf>

Gamama, J. M., Luciano, M. T., Gradus, J. L., & Willsey Stirman, S. (2015). Assessing variability and implementation fidelity of suicide prevention safety planning in a regional va healthcare system. *Crisis*, 36(6), 433–439. <https://doi.org/10.1027/0227-5910/a000345>

Green, J. D., Kearns, J. C., Rosen, R. C., Keane, T. M., & Marx, B. P. (2018). Evaluating the effectiveness of safety plans for military veterans: Do safety plans tailored to veteran characteristics decrease suicide risk? *Behavior Therapy*, 49(6), 931–938. <https://doi.org/10.1016/j.beth.2017.11.005>

Moscardini, E. H., Hill, R. M., Dodd, C. G., Do, C., Kaplow, J. B., & Tucker, R. P. (2020). Suicide safety planning: Clinician training, comfort, and safety plan utilization. *International Journal of Environmental Research and Public Health*, 17(18), 6444. <https://doi.org/10.3390/ijerph17186444>

Stanley, B., Brown, G. K., Brenner, L. A., Galfalvy, H. C., Currier, G. W., Knox, K. L., Chaudhury, S. R., Bush, A. L., & Green, K. L. (2018). Comparison of the Safety Planning Intervention With Follow-up vs Usual Care of Suicidal Patients Treated in the Emergency Department. *JAMA psychiatry*, 75(9), 894–900. <https://doi.org/10.1001/jamapsychiatry.2018.1776>

Stanley, B., & Brown, G. (2019, August 20). *The safety planning intervention to reduce suicide risk for people with SAMI* [Power Point Slides]. Substance Abuse and Mental Health Services Administration. [https://www.samhsa.gov/sites/default/files/SAMI%20SP%20SAM%20DPT%20final\\_2.pdf](https://www.samhsa.gov/sites/default/files/SAMI%20SP%20SAM%20DPT%20final_2.pdf)

Stone, D., Jones, C., & Mack, K. (2021). Changes in suicide rates — United States, 2018–2019. *Morbidity and Mortality Weekly Report*, 70:261–268. DOI: <http://dx.doi.org/10.15585/mmwr.mm7008a1>

UNCLASSIFIED//FOUO

17

**References**

Ursano, R., Kessler, R., Naifeh, J., Herberman Mash, H., Fullerton, C., Bliese, P., Zaslavsky, A., Ng, T., Aliaga, P., Wynn, G., Dinh, H., McCarroll, J., Sampson, N., Kao, T., Schoenbaum, M., Heringa, S., Stein, M., & Army Study to Assess Risk and Resilience in Servicemembers (STARRS) Collaborators (2017). Risk of suicide attempt among soldiers in army units with a history of suicide attempts. *JAMA Psychiatry*, 74(9), 924–931. <https://doi.org/10.1001/jamapsychiatry.2017.1925>

US Army Suicide Prevention Program. (2020). *2020 Army Strategy for Suicide Prevention*. [https://www.army.mil/he/suicide/docs/2020%20Army%20Strategy%20for%20Suicide%20Prevention\\_1%20Oct%202017.pdf](https://www.army.mil/he/suicide/docs/2020%20Army%20Strategy%20for%20Suicide%20Prevention_1%20Oct%202017.pdf)

Wooten, N. R., Brittingham, J. A., Hossain, A., Hopkins, L. A., Sumi, N. S., Jeffery, D. D., Tavakoli, A. S., Chakraborty, H., Levkoff, S. E., & Larson, M. J. (2019). Army Warrior Care Project (AWCP): Rationale and methods for a longitudinal study of behavioral health care in Army Warrior Transition Units using Military Health System data, FY2008–2015. *International Journal of Methods in Psychiatric Research*, 29(3). <https://doi.org/10.1002/mpr.1788>

Zonana, J., Simberlund, J., & Christos, P. (2018). The impact of safety plans in an outpatient clinic. *Crisis*, 39(4), 304–309. <https://doi.org/10.1027/0227-5910/a000495>

UNCLASSIFIED//FOUO

18

## Appendix I

**Figure I. SPI Scoring Tool**

Unique Identifier:

Total Score Completeness:

Total Score Quality:

1) **Warning signs** (thoughts, images, mood, situation, behavior) that a crisis may be developing:

Completeness: (0) Not complete (1) Partially (2) Complete

Quality: (0) blank (1) boilerplate (2) Some evidence of personalization (3) Personalized and specific

2) **Internal coping strategies** – Things I can do to take my mind off my problems without contacting another person (relaxation technique, physical activity):

Completeness: (0) Not complete (1) Partially (2) Complete

Quality: (0) blank (1) boilerplate (2) Some evidence of personalization (3) Personalized and specific

3) **People and social settings that provide distraction:****(A) People**

Completeness: (0) Not complete (1) Partially (2) Complete

Quality: (0) blank (1) boilerplate (2) Some evidence of personalization (3) Personalized and specific

**(B) Places and Social Settings**

Completeness: (0) Not complete (1) Partially (2) Complete

Quality: (0) blank (1) boilerplate (2) Some evidence of personalization (3) Personalized and specific

4) **People whom I can ask for help:**

Completeness: (0) Not complete (1) Partially (2) Complete

Quality: (0) blank (1) boilerplate (2) Some evidence of personalization (3) Personalized and specific

5) **Professionals or agencies I can contact during a crisis:**

Completeness: (0) Not complete (1) Partially (2) Complete

Quality: (0) blank (1) boilerplate (2) Some evidence of personalization (3) Personalized and specific

6) **Making the environment safe:**

Completeness: (0) Not complete (1) Partially (2) Complete

Quality: (0) blank (1) boilerplate (2) Some evidence of personalization (3) Personalized and specific

**Unscheduled reengagement with Behavioral Health, related to suicidal thoughts, actions:** (1) Yes

(2) No

**Comments:**

## Appendix J

Figure J. Data Analysis Table

|                     |              | Variable Name                                                                  | Variable Description and type of measure                                                                                                                                                                                                                                                                            | Data Source    | Possible Range of Values                                                                          | Level of Measurement                                       | Time Frame for Collection                           | Statistical Test | Decision Rule                                                                                                    |
|---------------------|--------------|--------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------------|-----------------------------------------------------|------------------|------------------------------------------------------------------------------------------------------------------|
| Population or Event | Intervention | Safety Plan Training for Providers                                             | Brief refresher training for providers on utilizing the Safety Plan Intervention (SPI) with every patient.                                                                                                                                                                                                          | Records review | Completed or Not Completed                                                                        | Nominal                                                    | Three weeks                                         | N/A              | N/A                                                                                                              |
|                     | Outcome      | 1: Rates of completion to standardized SPI implementation                      | Records review to see if SPI was being updated periodically with changes in the patient's clinical presentation                                                                                                                                                                                                     | Records review | Completed: 2<br>Partial (with comment): 1<br><br>Not Completed: 0                                 | Continuous                                                 | Pre training vs. post-training for both DV1 and DV2 | None used        | >90% is ideal, but >70% adherence to an HTN CPG showed clinically significant improvements (Martin et al., 2020) |
|                     |              | 2: The percentage of completeness of SPI in the chart                          | Audit SPI items are filled without conflicting information or low quality<br><br>Quality scored from 0 to 3 (0 = blank, 1 = not personalized, 2 = some evidence of personalization, 3 = specific to the individual and personal. SPI's calculating the total of the score, ranging from 0-21 (Gamarra, et al, 2015) | Records review | Percentage from 0 to 100                                                                          | ordinal I                                                  | Pre training vs. post-training for both DV1 and DV2 | None used        |                                                                                                                  |
|                     |              | 3: Suicide behaviors                                                           | The mode of the score of question 9 on the PHQ-9                                                                                                                                                                                                                                                                    | Records review | Not at all: 0<br><br>Several Days: 1<br><br>More than half the days: 2<br><br>Nearly Every Day: 3 | PHQ-9 questionnaire questions 9<br><br>Ordinal Self Report | Pre training vs. post-training for both DV1 and DV2 | None used        | One point reduction in the score of question 9 on the PHQ-9 will be considered significant.                      |
|                     |              | 4: Unscheduled Patient Reengagement with behavioral health, related to suicide | Records review to see if patients have reengaged with behavioral health for a suicide-related issue after SPI                                                                                                                                                                                                       | Records review | Not at all: 0<br><br>Any reengagement: 1                                                          | Yes or No<br><br>Binary                                    | Pre training vs. post-training                      | None used        |                                                                                                                  |

## Appendix K

**Appendix K.** Comparison of Recommendations for When an SPI is Required

| <b><i>VA/DoD Clinical Practice Guideline for the Assessment and Management for Patients at Risk for Suicide (2019) recommendations</i></b> | <b><i>Defense Health Agency Administrative Instruction 6025.06 (2022) recommendations</i></b>                                                 | <b><i>OTSG Policy Memo 21-011, Behavioral Health At Risk Management Policy (2019) recommendations</i></b>                                     |
|--------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| SPI should be initiated for all patients with High Acute Risk, Intermediate Acute Risk, High Chronic Risk, Intermediate Chronic Risk       | SPI should be initiated for all patients with High Acute Risk, Intermediate Acute Risk<br><br>When hospitalized for Behavioral Health Reasons | SPI should be initiated for all patients with High Acute Risk, Intermediate Acute Risk<br><br>When hospitalized for Behavioral Health Reasons |

## Appendix L

**Appendix L. VA/DoD Clinical Practice Guideline Risk Stratification Guide**

*VA/DoD Clinical Practice Guideline for the Assessment and Management for Patients at Risk for Suicide* (2019, pp. 23-24) Risk Stratification Tables

| Sidebar 2a. Essential Features from Risk Stratification Table – Acute Risk <sup>12</sup> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Level of Risk                                                                            | Essential Features                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Action                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>High Acute Risk</b>                                                                   | <ul style="list-style-type: none"> <li>– Suicidal ideation with intent to die by suicide</li> <li>– Inability to maintain safety, independent of external support/help</li> </ul> <p>Common warning signs:</p> <ul style="list-style-type: none"> <li>– A plan for suicide</li> <li>– Recent attempt and/or ongoing preparatory behaviors</li> <li>– Acute major mental illness (e.g., major depressive episode, acute mania, acute psychosis, recent/current drug relapse)</li> <li>– Exacerbation of personality disorder (e.g., increased borderline symptomatology)</li> </ul>                                                                                                                                                                                                              | <ul style="list-style-type: none"> <li>– Typically requires psychiatric hospitalization to maintain safety and aggressively target modifiable factors</li> <li>– These individuals may need to be directly observed until they are transferred to a secure unit and kept in an environment with limited access to lethal means (e.g., keep away from sharps, cords or tubing, toxic substances)</li> <li>– During hospitalization co-occurring conditions should also be addressed</li> </ul> |
| <b>Intermediate Acute Risk</b>                                                           | <ul style="list-style-type: none"> <li>– Suicidal ideation to die by suicide</li> <li>– Ability to maintain safety, independent of external support/help</li> </ul> <p>These individuals may present similarly to those at high acute risk, sharing many of the features. The only difference may be lack of intent, based upon an identified reason for living (e.g., children), and ability to abide by a safety plan and maintain their own safety. Preparatory behaviors are likely to be absent.</p>                                                                                                                                                                                                                                                                                       | <ul style="list-style-type: none"> <li>– Consider psychiatric hospitalization, if related factors driving risk are responsive to inpatient treatment (e.g., acute psychosis)</li> <li>– Outpatient management of suicidal thoughts and/or behaviors should be intensive and include: frequent contact, regular re-assessment of risk, and a well-articulated safety plan</li> <li>– Mental health treatment should also address co-occurring conditions</li> </ul>                            |
| <b>Low Acute Risk</b>                                                                    | <ul style="list-style-type: none"> <li>– No current suicidal intent AND</li> <li>– No specific and current suicidal plan AND</li> <li>– No recent preparatory behaviors AND</li> <li>– Collective high confidence (e.g., patient, care provider, family member) in the ability of the patient to independently maintain safety</li> </ul> <p>Individuals may have suicidal ideation, but it will be with little or no intent or specific current plan. If a plan is present, the plan is general and/or vague, and without any associated preparatory behaviors (e.g., “I’d shoot myself if things got bad enough, but I don’t have a gun”). These patients will be capable of engaging appropriate coping strategies, and willing and able to utilize a safety plan in a crisis situation.</p> | <ul style="list-style-type: none"> <li>– Can be managed in primary care</li> <li>– Outpatient mental health treatment may also be indicated, particularly if suicidal ideation and co-occurring conditions exist</li> </ul>                                                                                                                                                                                                                                                                   |

| Sidebar 2b. Essential Features from Risk Stratification Table – Chronic Risk <sup>13</sup> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Level of Risk                                                                              | Essential Features                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Action                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>High Chronic Risk</b>                                                                   | <p>Common warning sign:</p> <ul style="list-style-type: none"> <li>– Chronic suicidal ideation</li> </ul> <p>Common risk factors:</p> <ul style="list-style-type: none"> <li>– Chronic major mental illness and/or personality disorder</li> <li>– History of prior suicide attempt(s)</li> <li>– History of substance use disorders</li> <li>– Chronic pain</li> <li>– Chronic medical condition</li> <li>– Limited coping skills</li> <li>– Unstable or turbulent psychosocial status (e.g., unstable housing, erratic relationships, marginal employment)</li> <li>– Limited ability to identify reasons for living</li> </ul>                                                           | <p>These individuals are considered to be at chronic risk for becoming acutely suicidal, often in the context of unpredictable situational contingencies (e.g., job loss, loss of relationships, and relapse on drugs).</p> <p>These individuals typically require:</p> <ul style="list-style-type: none"> <li>– Routine mental health follow-up</li> <li>– A well-articulated safety plan, including lethal means safety (e.g., no access to guns, limited medication supply)</li> <li>– Routine suicide risk screening</li> <li>– Coping skills building</li> <li>– Management of co-occurring conditions</li> </ul> |
| <b>Intermediate Chronic Risk</b>                                                           | <ul style="list-style-type: none"> <li>– These individuals may feature similar chronicity as those at high chronic risk with respect to psychiatric, substance use, medical and pain disorders</li> <li>– Protective factors, coping skills, reasons for living, and relative psychosocial stability suggest enhanced ability to endure future crisis without engaging in self-directed violence</li> </ul>                                                                                                                                                                                                                                                                                 | <p>These individuals typically require:</p> <ul style="list-style-type: none"> <li>– Routine mental health care to optimize psychiatric conditions and maintain/enhance coping skills and protective factors</li> <li>– A well-articulated safety plan, including lethal means safety (e.g., safe storage of lethal means, medication disposal, blister packaging)</li> <li>– Management of co-occurring conditions</li> </ul>                                                                                                                                                                                         |
| <b>Low Chronic Risk</b>                                                                    | <ul style="list-style-type: none"> <li>– These individuals may range from persons with no or little in the way of mental health or substance use problems, to persons with significant mental illness that is associated with relatively abundant strengths/ resources</li> <li>– Stressors historically have typically been endured absent suicidal ideation</li> <li>– The following factors will generally be missing: <ul style="list-style-type: none"> <li>– History of self-directed violence</li> <li>– Chronic suicidal ideation</li> <li>– Tendency towards being highly impulsive</li> <li>– Risky behaviors</li> <li>– Marginal psychosocial functioning</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>– Appropriate for mental health care on an as needed basis, some may be managed in primary care settings</li> <li>– Others may require mental health follow-up to continue successful treatments</li> </ul>                                                                                                                                                                                                                                                                                                                                                                     |

## Appendix M

Figure M. Team Mentor and Committee Form

**DOCTOR OF NURSING PRACTICE PROJECT**  
**DNP Project Clinical Question and Team Mentor (Committee Membership) Agreement Form**

**Graduation Year:** \_\_\_\_\_

**Name(s) of DNP Project Student Team:**

1. CPT Parry, Ryan Phase II Site: AGCNS ☐ FNP ☐ PMHNP ☒ RNA ☐ WHNP ☐

2. MAJ Gee, Mavis Phase II Site: AGCNS ☐ FNP ☒ PMHNP ☐ RNA ☐ WHNP ☐

3. MAJ Lopes, Thales Phase II Site: AGCNS ☐ FNP ☐ PMHNP ☒ RNA ☐ WHNP ☐

4. \_\_\_\_\_ Phase II Site: AGCNS ☐ FNP ☐ PMHNP ☐ RNA ☐ WHNP ☐

5. \_\_\_\_\_ Phase II Site: AGCNS ☐ FNP ☐ PMHNP ☐ RNA ☐ WHNP ☐

6. \_\_\_\_\_ Phase II Site: AGCNS ☐ FNP ☐ PMHNP ☐ RNA ☐ WHNP ☐

**The tentative title of the DNP Project Proposal for this student group is:**  
Implementation and Evaluation of a Staff Educational Intervention to Standardize and Enhance Provider Adherence to the Safety Planning Intervention and Linkages with Patient Outcomes

**Committee Approved DNP Project Clinical Question:**  
In providers servicing active duty service members at Fort Bragg, does the implementation and evaluation of a staff educational intervention regarding Safety Plan Interventions improve provider adherence and patient suicide outcomes, as compared to pre-intervention?

**Names of DNP Project Team Mentors (type the name and obtain signatures):**

I agree to serve as a member of the DNP Project Team (Team Mentors) for the above DNP Student Project Team. As a Project Team Mentor, I agree to the duties and responsibilities outlined within the DNP Project Manual which include but are not limited to the provision of consultation and guidance supporting the entire DNP project journey and to ensure the DNP project is of sufficient rigor and demonstrates doctoral level scholarship to meet the requirements for USUHS GSN graduation.

**NOTE:** You may have 3-4 DNP Team Mentors [committee members including your DNP Senior Mentor (Chair)]. The Phase II Site Director may also be a member of the group, as well as other USUHS faculty or others who may serve as content experts. All non-USUHS faculty selected as a Team Mentor must be approved by the DNP Project Director.

Senior Mentor (Chair): \_\_\_\_\_ Signature: Nicole Moret Date: 2022.08.16 07:16:28 -0400

## Appendix N

Figure N. CITI Certificates, Gee (Bean), Lopes, Parry

**COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM)**  
**COMPLETION REPORT - PART 1 OF 2**  
**COURSEWORK REQUIREMENTS\***

\* NOTE: Scores on this Requirements Report reflect quiz completions at the time all requirements for the course were met. See list below for details. See separate Transcript Report for more recent quiz scores, including those on optional (supplemental) course elements.

• **Name:** Mavis Bean (ID: 10057910)  
 • **Institution Affiliation:** Office of the Under Secretary of Defense (Personnel and Readiness) (ID: 603)  
 • **Institution Email:** mavis.bean@usuhs.edu  
 • **Phone:** [REDACTED]

• **Curriculum Group:** OUSD P&R Human Research  
 • **Course Learner Group:** Biomed Research Coordinators, Clinical Coordinators, Study Coordinators & Research Administrators  
 • **Stage:** Stage 1 - Basic Course

• **Record ID:** 42064677  
 • **Completion Date:** 12-Apr-2021  
 • **Expiration Date:** 11-Apr-2024  
 • **Minimum Passing:** 80  
 • **Reported Score\*:** 95

| REQUIRED AND ELECTIVE MODULES ONLY                                                                         | DATE COMPLETED | SCORE      |
|------------------------------------------------------------------------------------------------------------|----------------|------------|
| Module for Non-DoD Personnel Conducting Research Involving Human Subjects Supported by the DoD (ID: 10709) | 12-Apr-2021    | No Quiz    |
| Belmont Report and Its Principles (ID: 1127)                                                               | 12-Apr-2021    | 3/3 (100%) |
| History and Ethics of Human Subjects Research (ID: 498)                                                    | 12-Apr-2021    | 5/5 (100%) |
| Informed Consent (ID: 3)                                                                                   | 12-Apr-2021    | 5/5 (100%) |
| Social and Behavioral Research (SBR) for Biomedical Researchers (ID: 4)                                    | 12-Apr-2021    | 4/4 (100%) |
| Records-Based Research (ID: 5)                                                                             | 12-Apr-2021    | 3/3 (100%) |
| Genetic Research in Human Populations (ID: 6)                                                              | 12-Apr-2021    | 5/5 (100%) |
| Populations in Research Requiring Additional Considerations and/or Protections (ID: 16680)                 | 12-Apr-2021    | 4/5 (80%)  |
| Research Involving Prisoners (ID: 8)                                                                       | 12-Apr-2021    | 4/4 (100%) |
| Research Involving Children (ID: 9)                                                                        | 12-Apr-2021    | 3/3 (100%) |
| Research Involving Pregnant Women, Fetuses, and Neonates (ID: 10)                                          | 12-Apr-2021    | 3/3 (100%) |
| FDA-Regulated Research (ID: 12)                                                                            | 12-Apr-2021    | 5/5 (100%) |
| Research and HIPAA Privacy Protections (ID: 14)                                                            | 12-Apr-2021    | 4/5 (80%)  |
| Conflicts of Interest in Human Subjects Research (ID: 17464)                                               | 12-Apr-2021    | 5/5 (100%) |
| Defining Research with Human Subjects - SBE (ID: 491)                                                      | 12-Apr-2021    | 5/5 (100%) |
| The Federal Regulations - SBE (ID: 502)                                                                    | 12-Apr-2021    | 5/5 (100%) |
| Assessing Risk - SBE (ID: 503)                                                                             | 12-Apr-2021    | 5/5 (100%) |
| Privacy and Confidentiality - SBE (ID: 505)                                                                | 12-Apr-2021    | 5/5 (100%) |
| Research in Public Elementary and Secondary Schools - SBE (ID: 508)                                        | 12-Apr-2021    | 5/5 (100%) |
| Internet-Based Research - SBE (ID: 510)                                                                    | 12-Apr-2021    | 5/5 (100%) |
| International Studies (ID: 971)                                                                            | 12-Apr-2021    | 3/3 (100%) |
| The IRB Member Module - 'What Every New IRB Member Needs to Know' (ID: 816)                                | 12-Apr-2021    | 2/5 (40%)  |
| Office of the Under Secretary of Defense (Personnel and Readiness) (ID: 912)                               | 12-Apr-2021    | No Quiz    |

For this Report to be valid, the learner identified above must have had a valid affiliation with the CITI Program subscribing institution identified above or have been a paid Independent Learner.

Verify at: [www.citiprogram.org/verify/?k22f9aaf9-430d-4323-b882-c7ee980e1dad-42064677](http://www.citiprogram.org/verify/?k22f9aaf9-430d-4323-b882-c7ee980e1dad-42064677)

Collaborative Institutional Training Initiative (CITI Program)  
 Email: [support@citiprogram.org](mailto:support@citiprogram.org)  
 Phone: 888-529-5929  
 Web: <https://www.citiprogram.org>

## COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM)

### COMPLETION REPORT - PART 2 OF 2

#### COURSEWORK TRANSCRIPT\*\*

\*\* NOTE: Scores on this Transcript Report reflect the most current quiz completions, including quizzes on optional (supplemental) elements of the course. See list below for details. See separate Requirements Report for the reported scores at the time all requirements for the course were met.

- **Name:** Mavis Bean (ID: 10057910)
- **Institution Affiliation:** Office of the Under Secretary of Defense (Personnel and Readiness) (ID: 603)
- **Institution Email:** mavis.bean@usuhs.edu
- **Phone:** [REDACTED]
- **Curriculum Group:** OUSD P&R Human Research
- **Course Learner Group:** Biomed Research Coordinators, Clinical Coordinators, Study Coordinators & Research Administrators
- **Stage:** Stage 1 - Basic Course
- **Record ID:** 42064677
- **Report Date:** 15-Apr-2021
- **Current Score\*\*:** 95

| REQUIRED, ELECTIVE, AND SUPPLEMENTAL MODULES                                                               | MOST RECENT SCORE |            |
|------------------------------------------------------------------------------------------------------------|-------------------|------------|
| Informed Consent (ID: 3)                                                                                   | 12-Apr-2021       | 5/5 (100%) |
| Defining Research with Human Subjects - SBE (ID: 491)                                                      | 12-Apr-2021       | 5/5 (100%) |
| The Federal Regulations - SBE (ID: 502)                                                                    | 12-Apr-2021       | 5/5 (100%) |
| Social and Behavioral Research (SBR) for Biomedical Researchers (ID: 4)                                    | 12-Apr-2021       | 4/4 (100%) |
| Belmont Report and Its Principles (ID: 1127)                                                               | 12-Apr-2021       | 3/3 (100%) |
| Records-Based Research (ID: 5)                                                                             | 12-Apr-2021       | 3/3 (100%) |
| Assessing Risk - SBE (ID: 503)                                                                             | 12-Apr-2021       | 5/5 (100%) |
| Genetic Research in Human Populations (ID: 6)                                                              | 12-Apr-2021       | 5/5 (100%) |
| Research Involving Prisoners (ID: 8)                                                                       | 12-Apr-2021       | 4/4 (100%) |
| Privacy and Confidentiality - SBE (ID: 505)                                                                | 12-Apr-2021       | 5/5 (100%) |
| Research Involving Children (ID: 9)                                                                        | 12-Apr-2021       | 3/3 (100%) |
| Research Involving Pregnant Women, Fetuses, and Neonates (ID: 10)                                          | 12-Apr-2021       | 3/3 (100%) |
| FDA-Regulated Research (ID: 12)                                                                            | 12-Apr-2021       | 5/5 (100%) |
| Research in Public Elementary and Secondary Schools - SBE (ID: 508)                                        | 12-Apr-2021       | 5/5 (100%) |
| Research and HIPAA Privacy Protections (ID: 14)                                                            | 12-Apr-2021       | 4/5 (80%)  |
| Internet-Based Research - SBE (ID: 510)                                                                    | 12-Apr-2021       | 5/5 (100%) |
| History and Ethics of Human Subjects Research (ID: 498)                                                    | 12-Apr-2021       | 5/5 (100%) |
| Office of the Under Secretary of Defense (Personnel and Readiness) (ID: 912)                               | 12-Apr-2021       | No Quiz    |
| Populations in Research Requiring Additional Considerations and/or Protections (ID: 16680)                 | 12-Apr-2021       | 4/5 (80%)  |
| International Studies (ID: 971)                                                                            | 12-Apr-2021       | 3/3 (100%) |
| The IRB Member Module - 'What Every New IRB Member Needs to Know' (ID: 816)                                | 12-Apr-2021       | 2/5 (40%)  |
| Conflicts of Interest in Human Subjects Research (ID: 17464)                                               | 12-Apr-2021       | 5/5 (100%) |
| Module for Non-DoD Personnel Conducting Research Involving Human Subjects Supported by the DoD (ID: 16769) | 12-Apr-2021       | No Quiz    |

For this Report to be valid, the learner identified above must have had a valid affiliation with the CITI Program subscribing institution identified above or have been a paid Independent Learner.

Verify at: [www.citiprogram.org/verify/?k22f9aaf9-430d-4323-b882-c7ee980e1dad-42064677](http://www.citiprogram.org/verify/?k22f9aaf9-430d-4323-b882-c7ee980e1dad-42064677)

Collaborative Institutional Training Initiative (CITI Program)

Email: [support@citiprogram.org](mailto:support@citiprogram.org)

Phone: 888-529-5929

Web: <https://www.citiprogram.org>

## COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM)

### COMPLETION REPORT - PART 1 OF 2 COURSEWORK REQUIREMENTS\*

\* NOTE: Scores on this Requirements Report reflect quiz completions at the time all requirements for the course were met. See list below for details. See separate Transcript Report for more recent quiz scores, including those on optional (supplemental) course elements.

**Name:** Ryan Parry (ID: 10043446)  
**Institution Affiliation:** Office of the Under Secretary of Defense (Personnel and Readiness) (ID: 603)  
**Institution Email:** ryan.parry@usuhs.edu  
**Phone:** [REDACTED]  
  
**Curriculum Group:** OUSD P&R Human Research  
**Course Learner Group:** Social and Behavioral Investigators and Research Study Team  
**Stage:** Stage 1 - Basic Course  
  
**Record ID:** 42063979  
**Completion Date:** 12-Apr-2021  
**Expiration Date:** 11-Apr-2024  
**Minimum Passing:** 80  
**Reported Score\*:** 92

| REQUIRED AND ELECTIVE MODULES ONLY                                                                         | DATE COMPLETED | SCORE      |
|------------------------------------------------------------------------------------------------------------|----------------|------------|
| Module for Non-DoD Personnel Conducting Research Involving Human Subjects Supported by the DoD (ID: 16769) | 05-Apr-2021    | No Quiz    |
| Belmont Report and Its Principles (ID: 1127)                                                               | 05-Apr-2021    | 3/3 (100%) |
| History and Ethical Principles - SBE (ID: 490)                                                             | 12-Apr-2021    | 5/5 (100%) |
| Defining Research with Human Subjects - SBE (ID: 491)                                                      | 09-Apr-2021    | 5/5 (100%) |
| The Federal Regulations - SBE (ID: 502)                                                                    | 09-Apr-2021    | 5/5 (100%) |
| Assessing Risk - SBE (ID: 503)                                                                             | 09-Apr-2021    | 5/5 (100%) |
| Informed Consent - SBE (ID: 504)                                                                           | 12-Apr-2021    | 5/5 (100%) |
| Privacy and Confidentiality - SBE (ID: 505)                                                                | 12-Apr-2021    | 5/5 (100%) |
| Research with Prisoners - SBE (ID: 506)                                                                    | 12-Apr-2021    | 4/5 (80%)  |
| Research with Children - SBE (ID: 507)                                                                     | 12-Apr-2021    | 4/5 (80%)  |
| Research in Public Elementary and Secondary Schools - SBE (ID: 508)                                        | 09-Apr-2021    | 4/5 (80%)  |
| International Research - SBE (ID: 509)                                                                     | 12-Apr-2021    | 5/5 (100%) |
| Internet-Based Research - SBE (ID: 510)                                                                    | 09-Apr-2021    | 5/5 (100%) |
| Unanticipated Problems and Reporting Requirements in Social and Behavioral Research (ID: 14928)            | 12-Apr-2021    | 3/5 (60%)  |
| Basic Institutional Review Board (IRB) Regulations and Review Process (ID: 2)                              | 06-Apr-2021    | 5/5 (100%) |
| Records-Based Research (ID: 5)                                                                             | 07-Apr-2021    | 3/3 (100%) |
| Genetic Research in Human Populations (ID: 6)                                                              | 07-Apr-2021    | 5/5 (100%) |
| Populations in Research Requiring Additional Considerations and/or Protections (ID: 16680)                 | 07-Apr-2021    | 4/5 (80%)  |
| Research Involving Pregnant Women, Fetuses, and Neonates (ID: 10)                                          | 07-Apr-2021    | 3/3 (100%) |
| FDA-Regulated Research (ID: 12)                                                                            | 07-Apr-2021    | 5/5 (100%) |
| Research and HIPAA Privacy Protections (ID: 14)                                                            | 09-Apr-2021    | 4/5 (80%)  |
| Conflicts of Interest in Human Subjects Research (ID: 17464)                                               | 09-Apr-2021    | 5/5 (100%) |
| The IRB Member Module - 'What Every New IRB Member Needs to Know' (ID: 816)                                | 09-Apr-2021    | 4/5 (80%)  |
| Office of the Under Secretary of Defense (Personnel and Readiness) (ID: 912)                               | 11-Apr-2021    | No Quiz    |

For this Report to be valid, the learner identified above must have had a valid affiliation with the CITI Program subscribing institution identified above or have been a paid Independent Learner.

Verify at: [www.citiprogram.org/verify/7x46a8be2e-b4bc-43d6-b8aa-920b476790d1-42063979](http://www.citiprogram.org/verify/7x46a8be2e-b4bc-43d6-b8aa-920b476790d1-42063979)

Collaborative Institutional Training Initiative (CITI Program)

Email: [support@citiprogram.org](mailto:support@citiprogram.org)

Phone: [REDACTED]

Web: <https://www.citiprogram.org>

## COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM)

### COMPLETION REPORT - PART 2 OF 2 COURSEWORK TRANSCRIPT\*\*

\*\* NOTE: Scores on this Transcript Report reflect the most current quiz completions, including quizzes on optional (supplemental) elements of the course. See list below for details. See separate Requirements Report for the reported scores at the time all requirements for the course were met.

**Name:** Ryan Parry (ID: 10043446)  
**Institution Affiliation:** Office of the Under Secretary of Defense (Personnel and Readiness) (ID: 603)  
**Institution Email:** ryan.parry@usuhs.edu  
**Phone:** [REDACTED]  
**Curriculum Group:** OUSD P&R Human Research  
**Course Learner Group:** Social and Behavioral Investigators and Research Study Team  
**Stage:** Stage 1 - Basic Course  
**Record ID:** 42063979  
**Report Date:** 14-Apr-2021  
**Current Score\*\*:** 92

| REQUIRED, ELECTIVE, AND SUPPLEMENTAL MODULES                                                               | MOST RECENT SCORE |            |
|------------------------------------------------------------------------------------------------------------|-------------------|------------|
| Basic Institutional Review Board (IRB) Regulations and Review Process (ID: 2)                              | 06-Apr-2021       | 5/5 (100%) |
| Defining Research with Human Subjects - SBE (ID: 491)                                                      | 09-Apr-2021       | 5/5 (100%) |
| The Federal Regulations - SBE (ID: 502)                                                                    | 09-Apr-2021       | 5/5 (100%) |
| Belmont Report and Its Principles (ID: 1127)                                                               | 05-Apr-2021       | 3/3 (100%) |
| Records-Based Research (ID: 5)                                                                             | 07-Apr-2021       | 3/3 (100%) |
| Assessing Risk - SBE (ID: 503)                                                                             | 09-Apr-2021       | 5/5 (100%) |
| Informed Consent - SBE (ID: 504)                                                                           | 12-Apr-2021       | 5/5 (100%) |
| Genetic Research in Human Populations (ID: 6)                                                              | 07-Apr-2021       | 5/5 (100%) |
| Privacy and Confidentiality - SBE (ID: 505)                                                                | 12-Apr-2021       | 5/5 (100%) |
| Research with Prisoners - SBE (ID: 506)                                                                    | 12-Apr-2021       | 4/5 (80%)  |
| Research with Children - SBE (ID: 507)                                                                     | 12-Apr-2021       | 4/5 (80%)  |
| Research Involving Pregnant Women, Fetuses, and Neonates (ID: 10)                                          | 07-Apr-2021       | 3/3 (100%) |
| FDA-Regulated Research (ID: 12)                                                                            | 07-Apr-2021       | 5/5 (100%) |
| Research in Public Elementary and Secondary Schools - SBE (ID: 508)                                        | 09-Apr-2021       | 4/5 (80%)  |
| International Research - SBE (ID: 509)                                                                     | 12-Apr-2021       | 5/5 (100%) |
| Research and HIPAA Privacy Protections (ID: 14)                                                            | 09-Apr-2021       | 4/5 (80%)  |
| Internet-Based Research - SBE (ID: 510)                                                                    | 09-Apr-2021       | 5/5 (100%) |
| Unanticipated Problems and Reporting Requirements in Social and Behavioral Research (ID: 14928)            | 12-Apr-2021       | 3/5 (60%)  |
| History and Ethical Principles - SBE (ID: 490)                                                             | 12-Apr-2021       | 5/5 (100%) |
| Office of the Under Secretary of Defense (Personnel and Readiness) (ID: 912)                               | 11-Apr-2021       | No Quiz    |
| Populations in Research Requiring Additional Considerations and/or Protections (ID: 16680)                 | 07-Apr-2021       | 4/5 (80%)  |
| The IRB Member Module - 'What Every New IRB Member Needs to Know' (ID: 816)                                | 09-Apr-2021       | 4/5 (80%)  |
| Conflicts of Interest in Human Subjects Research (ID: 17464)                                               | 09-Apr-2021       | 5/5 (100%) |
| Module for Non-DoD Personnel Conducting Research Involving Human Subjects Supported by the DoD (ID: 16769) | 05-Apr-2021       | No Quiz    |

For this Report to be valid, the learner identified above must have had a valid affiliation with the CITI Program subscribing institution identified above or have been a paid Independent Learner.

Verify at: [www.citiprogram.org/verify/7x46a8be2e-b4bc-43d6-b8aa-920b476790d1-42063979](http://www.citiprogram.org/verify/7x46a8be2e-b4bc-43d6-b8aa-920b476790d1-42063979)

Collaborative Institutional Training Initiative (CITI Program)

Email: [support@citiprogram.org](mailto:support@citiprogram.org)

Phone: [REDACTED]

Web: <https://www.citiprogram.org>

## COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM)

### COMPLETION REPORT - PART 1 OF 2 COURSEWORK REQUIREMENTS\*

\* NOTE: Scores on this Requirements Report reflect quiz completions at the time all requirements for the course were met. See list below for details. See separate Transcript Report for more recent quiz scores, including those on optional (supplemental) course elements.

• **Name:** Thales Lopes (ID: 10064127)  
 • **Institution Affiliation:** Office of the Under Secretary of Defense (Personnel and Readiness) (ID: 603)  
 • **Institution Email:** THALES.LOPES@USUHS.EDU  
 • **Institution Unit:** nursing  
 • **Phone:** [REDACTED]

• **Curriculum Group:** OUSD P&R Human Research  
 • **Course Learner Group:** Biomedical Research Support Staff  
 • **Stage:** Stage 1 - Basic Course

• **Record ID:** 42098715  
 • **Completion Date:** 14-Apr-2021  
 • **Expiration Date:** 13-Apr-2024  
 • **Minimum Passing:** 80  
 • **Reported Score\*:** 92

| REQUIRED AND ELECTIVE MODULES ONLY                                                                         | DATE COMPLETED | SCORE      |
|------------------------------------------------------------------------------------------------------------|----------------|------------|
| Module for Non-DoD Personnel Conducting Research Involving Human Subjects Supported by the DoD (ID: 16769) | 14-Apr-2021    | No Quiz    |
| Belmont Report and Its Principles (ID: 1127)                                                               | 14-Apr-2021    | 3/3 (100%) |
| History and Ethics of Human Subjects Research (ID: 498)                                                    | 14-Apr-2021    | 5/5 (100%) |
| Informed Consent (ID: 3)                                                                                   | 14-Apr-2021    | 4/5 (80%)  |
| Social and Behavioral Research (SBR) for Biomedical Researchers (ID: 4)                                    | 14-Apr-2021    | 3/4 (75%)  |
| Records-Based Research (ID: 5)                                                                             | 14-Apr-2021    | 3/3 (100%) |
| Genetic Research in Human Populations (ID: 6)                                                              | 14-Apr-2021    | 4/5 (80%)  |
| Populations in Research Requiring Additional Considerations and/or Protections (ID: 16680)                 | 14-Apr-2021    | 4/5 (80%)  |
| Research Involving Prisoners (ID: 8)                                                                       | 14-Apr-2021    | 3/4 (75%)  |
| Research Involving Children (ID: 9)                                                                        | 14-Apr-2021    | 3/3 (100%) |
| Research Involving Pregnant Women, Fetuses, and Neonates (ID: 10)                                          | 14-Apr-2021    | 3/3 (100%) |
| FDA-Regulated Research (ID: 12)                                                                            | 14-Apr-2021    | 5/5 (100%) |
| Research and HIPAA Privacy Protections (ID: 14)                                                            | 14-Apr-2021    | 5/5 (100%) |
| Conflicts of Interest in Human Subjects Research (ID: 17464)                                               | 14-Apr-2021    | 5/5 (100%) |
| The Federal Regulations - SBE (ID: 502)                                                                    | 14-Apr-2021    | 5/5 (100%) |
| Privacy and Confidentiality - SBE (ID: 505)                                                                | 14-Apr-2021    | 5/5 (100%) |
| Research in Public Elementary and Secondary Schools - SBE (ID: 508)                                        | 14-Apr-2021    | 4/5 (80%)  |
| Internet-Based Research - SBE (ID: 510)                                                                    | 14-Apr-2021    | 5/5 (100%) |
| International Studies (ID: 971)                                                                            | 14-Apr-2021    | 3/3 (100%) |
| Office of the Under Secretary of Defense (Personnel and Readiness) (ID: 912)                               | 14-Apr-2021    | No Quiz    |

For this Report to be valid, the learner identified above must have had a valid affiliation with the CITI Program subscribing institution identified above or have been a paid Independent Learner.

Verify at: [www.citiprogram.org/verify/?kabb5a357-4a2d-4705-a3c3-0eaac3d28cf6-42098715](http://www.citiprogram.org/verify/?kabb5a357-4a2d-4705-a3c3-0eaac3d28cf6-42098715)

Collaborative Institutional Training Initiative (CITI Program)

Email: [support@citiprogram.org](mailto:support@citiprogram.org)

Phone: [REDACTED]

Web: <https://www.citiprogram.org>

## COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM)

### COMPLETION REPORT - PART 2 OF 2 COURSEWORK TRANSCRIPT\*\*

\*\* NOTE: Scores on this Transcript Report reflect the most current quiz completions, including quizzes on optional (supplemental) elements of the course. See list below for details. See separate Requirements Report for the reported scores at the time all requirements for the course were met.

• **Name:** Thales Lopes (ID: 10064127)  
 • **Institution Affiliation:** Office of the Under Secretary of Defense (Personnel and Readiness) (ID: 603)  
 • **Institution Email:** THALES.LOPES@USUHS.EDU  
 • **Institution Unit:** nursing  
 • **Phone:** [REDACTED]

• **Curriculum Group:** OUSD P&R Human Research  
 • **Course Learner Group:** Biomedical Research Support Staff  
 • **Stage:** Stage 1 - Basic Course

• **Record ID:** 42098715  
 • **Report Date:** 18-Apr-2021  
 • **Current Score\*\*:** 92

| REQUIRED, ELECTIVE, AND SUPPLEMENTAL MODULES                                                               | MOST RECENT SCORE |            |
|------------------------------------------------------------------------------------------------------------|-------------------|------------|
| Informed Consent (ID: 3)                                                                                   | 14-Apr-2021       | 4/5 (80%)  |
| Social and Behavioral Research (SBR) for Biomedical Researchers (ID: 4)                                    | 14-Apr-2021       | 3/4 (75%)  |
| The Federal Regulations - SBE (ID: 502)                                                                    | 14-Apr-2021       | 5/5 (100%) |
| Belmont Report and Its Principles (ID: 1127)                                                               | 14-Apr-2021       | 3/3 (100%) |
| Records-Based Research (ID: 5)                                                                             | 14-Apr-2021       | 3/3 (100%) |
| Genetic Research in Human Populations (ID: 6)                                                              | 14-Apr-2021       | 4/5 (80%)  |
| Research Involving Prisoners (ID: 8)                                                                       | 14-Apr-2021       | 3/4 (75%)  |
| Privacy and Confidentiality - SBE (ID: 505)                                                                | 14-Apr-2021       | 5/5 (100%) |
| Research Involving Children (ID: 9)                                                                        | 14-Apr-2021       | 3/3 (100%) |
| Research Involving Pregnant Women, Fetuses, and Neonates (ID: 10)                                          | 14-Apr-2021       | 3/3 (100%) |
| FDA-Regulated Research (ID: 12)                                                                            | 14-Apr-2021       | 5/5 (100%) |
| Research in Public Elementary and Secondary Schools - SBE (ID: 508)                                        | 14-Apr-2021       | 4/5 (80%)  |
| Research and HIPAA Privacy Protections (ID: 14)                                                            | 14-Apr-2021       | 5/5 (100%) |
| History and Ethics of Human Subjects Research (ID: 498)                                                    | 14-Apr-2021       | 5/5 (100%) |
| Internet-Based Research - SBE (ID: 510)                                                                    | 14-Apr-2021       | 5/5 (100%) |
| Office of the Under Secretary of Defense (Personnel and Readiness) (ID: 912)                               | 15-Apr-2021       | No Quiz    |
| Populations in Research Requiring Additional Considerations and/or Protections (ID: 16680)                 | 14-Apr-2021       | 4/5 (80%)  |
| International Studies (ID: 971)                                                                            | 14-Apr-2021       | 3/3 (100%) |
| Conflicts of Interest in Human Subjects Research (ID: 17464)                                               | 14-Apr-2021       | 5/5 (100%) |
| Module for Non-DoD Personnel Conducting Research Involving Human Subjects Supported by the DoD (ID: 16769) | 14-Apr-2021       | No Quiz    |

For this Report to be valid, the learner identified above must have had a valid affiliation with the CITI Program subscribing institution identified above or have been a paid Independent Learner.

Verify at: [www.citiprogram.org/verify/?kabb5a357-4a2d-4705-a3c3-0eaac3d28cf6-42098715](http://www.citiprogram.org/verify/?kabb5a357-4a2d-4705-a3c3-0eaac3d28cf6-42098715)

Collaborative Institutional Training Initiative (CITI Program)

Email: [support@citiprogram.org](mailto:support@citiprogram.org)

Phone: [REDACTED]

Web: <https://www.citiprogram.org>

## Appendix O

## Appendix O. USU VPR Form

USUHS FORM 3202N

DANIEL K. INOUE GRADUATE SCHOOL OF NURSING

EVIDENCE-BASED PRACTICE/PERFORMANCE IMPROVEMENT PROPOSAL

VPR Date Stamp

Project Number: **GSN-61-13224**

(VPR will script)

Project Title: **Implementation and Evaluation of a Staff Educational Intervention to Standardize and Enhance Provider Adherence to the Safety Planning Intervention and Linkages with Patient Outcomes**

## SECTION A: STUDENT POC INFORMATION

1. Name (Last, First, MI): **Parry, Ryan** Student E-mail: **ryan.parry@usuhs.edu**

2. Home Address [REDACTED] Cell Number [REDACTED]

## SECTION B: COMMITTEE CHAIR / SENIOR MENTOR INFORMATION

3. Name (Last, First, MI): **Moret, Nicole**4. Telephone [REDACTED] Fax: [REDACTED] E-mail: **nicole.moret@usuhs.edu**5. USUHS Building/ Room No.: **Building E/Rm 1010**

## SECTION C: PROJECT INFORMATION

6. Attach the Abstract for the proposal, including the following sections: Site Location of the Project, Title, Authors, Background or Problem/Issue, Clinical Question/Purpose, Project Design, Anticipated Organizational Impact/Implications for Practice and also include the Proposed Timeline. Single space the abstract and use Times New Roman font, size 12.

7. Is this proposal related to an active research project of the Chair/Senior Mentor identified in Section B? ☒ Yes ☐ No  
If yes, complete below; if no, proceed to Part 8.Project Number: **(Pending)**Project Title: **Implementation and Evaluation of a Staff Educational Intervention to Standardize and Enhance Provider Adherence to the Safety Planning Intervention and Linkages with Patient Outcomes**Project Start Date: **9/8/2022**Project End Date: **3/31/2022**8. Anticipated period of performance: Project Start Date: **9/8/2022** Project End Date: **3/31/2022**9. Performance Site(s): **Fort Bragg, North Carolina**10. Does this project involve any classified information? (Contact the USUHS Security Office for guidance) ☐ Yes ☒ No11. Do you have a funding source for this project? ☐ Yes ☐ No ☒ NA

If yes, specify the funding agency and the amount provided:

## SECTION D: SIGNATURES

The following signatures attest to the validity of the above information:

PARRY, RYAN, CHRISTOPHER.1  
239664225Digitally signed by  
PARRY, RYAN, CHRISTOPHER.1239664225  
Date: 2022.11.23 08:00:40 -05'00'

Student (Project Point of Contact for the Group) (Signature and Date)

OWEN, REGINA, D.1253117423

Digitally signed by OWEN, REGINA, D.1253117423  
Date: 2022.12.02 08:49:25 -05'00'

Chair/Program Director (Signature and Date)

Nicole Moret

Digitally signed by  
Moret  
Date: 2022.11.23 07:41:40 -05'00'

Chair/Senior Mentor (Signature and Date)

Chair/Program Director (Signature and Date)

DNP Project Director or PhD Director (Signature and Date)

SIMMONS, ANGELA, MARIE.1143313375

Digitally signed by  
SIMMONS, ANGELA, MARIE.1143313375  
Date: 2022.12.01 20:39:20 -05'00'

Associate Dean for Research, GSN (Signature and Date)

SEIBERT, DIANE, C.1084932279

Digitally signed by  
SEIBERT, DIANE, C.1084932279  
Date: 2022.12.01 17:28:02 -05'00'

Associate Dean for Academic Affairs, GSN (Signature and Date)

ROMANO, CAROL, A.1032050294

Digitally signed by  
ROMANO, CAROL, A.1032050294  
Date: 2022.12.01 21:28:25 -05'00'

Dean, DKU Graduate School of Nursing (Signature and Date)

In light of the above signatures, the project is approved.

WOODBERRY, MITCHEL

Digitally signed by  
WOODBERRY, MITCHEL, WAYNE.1060957114  
Date: 2022.02.23 10:38:56 -05'00'

L.WAYNE.1060957114

USUHS Vice President for Research

Date

## Appendix P

Figure P. MTF IRB Letter of Determination



**DEFENSE HEALTH AGENCY  
CENTRAL NORTH CAROLINA MARKET  
2817 REILLY ROAD FORT BRAGG, NORTH CAROLINA 28310**

MCXC-CNSCI

4 July 2022

MEMORANDUM FOR Director, WAMC Human Research Protection Program

SUBJECT: EBP Council determination of proposed project "Implementation and Evaluation of a Staff Educational Intervention to Standardize and Enhance Provider Adherence to the Safety Planning Intervention and Linkages with Patient Outcomes," submitted by CPT Ryan Parry, MAJ Mavis Gee, and MAJ Thales Lopes, Uniformed Services University Students.

1. This subject project was submitted for consideration to the EBP Council on 20 April 2022.

2. The goals of this project are to decrease suicide behaviors, increase military readiness, improve quality of care, and decrease the financial impact of suicide.

3. The EBP Council has agreed by unanimous vote that the subject project meets criteria to be considered an Evidence Based Practice project and does not meet the definition of research as defined by 32 CFR 219.102(l): a systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge.

4. It is hereby requested by the undersigned, Chair of the EBP Council, that this project be approved for a WAMC IRB Non-Research Determination letter.

5. The POC for this memo is the undersigned at [REDACTED] or mashandra.d.elam-canty.mil@mail.mil

ELAM-  
CANTY.MASHANDRA  
DATRES.1250390633

Digitally signed by ELAM-  
CANTY.MASHANDRA.DATRES.12  
50390633  
Date: 2022.07.04 17:45:11 -04'00'

MASHANDRA D. ELAM-CANTY  
LTC, AN  
Chair, WAMC EBP Council

## Appendix Q

**Figure Q. PAO Clearance**

MCXC-ME-RCI

21 April 2023

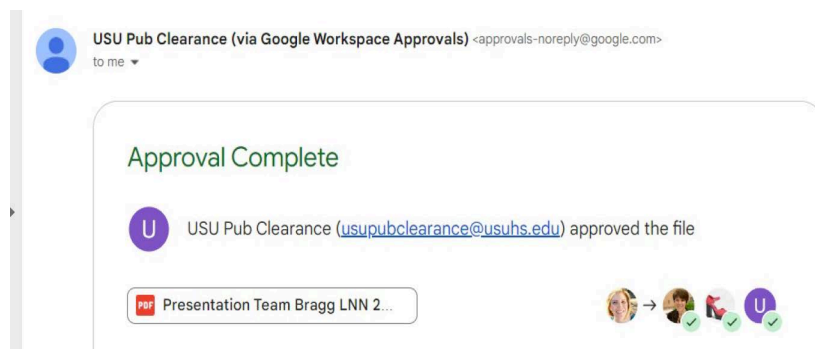
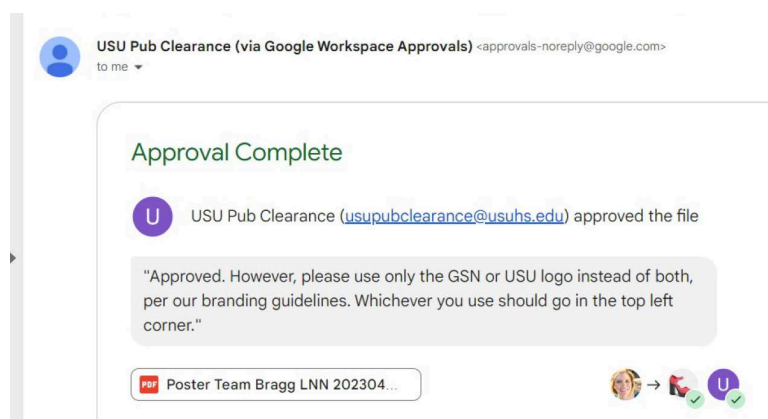
MEMORANDUM FOR CPT Ryan Parry

SUBJECT: WAMCPC1142, Implementation and Evaluation of a Staff Educational Intervention to Standardize and Enhance Provider Adherence to the Safety Planning Intervention and Linkages with Patient Outcomes

1. Your publication has been reviewed by all appropriate personnel and approved by the Department of Research for public presentation/submission.
2. This approval allows you to present the approved publication at other venues so long as only minor changes have occurred.
3. Thank you for your submission, and we look forward to seeing your scholarly activity in the near future. Please include the title of your publication and reference number in all correspondence.
4. The POC for this memorandum is Melissa Griffin at [REDACTED] melissa.e.griffin.civ@health.mil.

GRIFFIN, MELISSA  
ERIN.1253823824  
DATE: 2023-04-21 08:57:42 -0400

Melissa Griffin  
Research/Clinical Investigation  
Womack Army Medical Center



## Appendix R

Figure R. DNP Project Verification Form



Appendix G: Daniel K. Inouye Graduate School of Nursing  
DNP Project Completion Verification Form

**DOCTOR OF NURSING PRACTICE PROJECT**  
**Completion Verification Form**

The DNP Project titled:

Implementation and Evaluation of a Staff Educational Intervention to Standardize and Enhance Provider Adherence to the Safety Planning Intervention and Linkages with Patient Outcomes

was completed at: Fort Bragg, North Carolina

by the following student(s):

| (type student name) | (signature)                                                                                                                            | (date) |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------|--------|
| Ryan Parry          | PARRY.RYAN.CHRISTOPHE<br>R.1239664225<br>Digitally signed by<br>PARRY.RYAN.CHRISTOPHER.1239664225<br>Date: 2023.04.26 11:23:01 -04'00' |        |
| Thales Lopes        | LOPES.THALES.DEIVES.12<br>74401784<br>Digitally signed by<br>LOPES.THALES.DEIVES.1274401784<br>Date: 2023.04.26 11:12:12 -04'00'       |        |
| Mavis Gee           | Mavis Gee<br>Digitally signed by Mavis Gee<br>Date: 2023.04.26 10:13:09 -04'00'                                                        |        |
|                     |                                                                                                                                        |        |
|                     |                                                                                                                                        |        |

The DNP Practice Project Team verifies that the following components of the DNP project, accomplished by the above students, is of sufficient rigor and demonstrates doctoral level scholarship to meet the requirements for USUHS GSN graduation:

- Presentation of DNP project to the leadership/stakeholders at the Phase II Site,
- Abstract/Impact Statement (*Appendix F*), and
- DNP Project written report.

Verified by:

|                | (type name)      | (signature)                                                                                 | (date) |
|----------------|------------------|---------------------------------------------------------------------------------------------|--------|
| Senior Mentor: | Dr. Nicole Moret | Nicole Moret<br>Digitally signed by Nicole<br>Moret<br>Date: 2023.04.26 14:51:02<br>-04'00' |        |
| Team Mentor:   |                  |                                                                                             |        |
| Team Mentor:   |                  |                                                                                             |        |

Phase II Site

Director: Dr Lauren Nash

NASH.LAUREN.NI  
COLE.1258519490  
Digitally signed by  
NASH.LAUREN.NICOLE.1258519490  
Date: 2023.04.26 13:34:16 -04'00'

*For RNA Students only - add the following additional signature for final verification of project completion:*

|                                  |             |        |
|----------------------------------|-------------|--------|
|                                  |             |        |
| RNA Project Director (type name) | (Signature) | (Date) |