Zero Suicide Systems Approach Pilot Project Highlights

The United States Air Force spearheaded the creation of the Zero Suicide Systems Approach (ZSSA) pilot, and it was the first Service branch to pilot test a Zero Suicide Framework. This pilot is a partnership between the Air Force Medical Readiness Agency (AFMRA) and the Clearinghouse for Military Family Readiness at Penn State (Clearinghouse). The ZSSA is a pilot test of the Zero Suicide Framework, which creates a healthcare, system-wide approach to suicide prevention by utilizing a framework that intends to close gaps in patient care through seven distinct components.

1. **Lead** a system-wide culture change committed to reducing suicides.
2. **Train** a competent, confident, and caring workforce.
3. **Identify** individuals with suicide risk via comprehensive screening and assessment.
4. **Engage** all individuals who are at risk of dying by suicide using a suicide care management plan.
5. **Treat** suicidal thoughts and behaviors using evidence-based treatments.
6. **Transition** individuals through care with warm hand-offs and supportive contacts.
7. **Improve** policies and procedures through continuous quality improvement.

The ZSSA framework aims to improve care and outcomes for individuals who are at risk for dying by suicide in the Air Force's healthcare system. It represents a commitment to patient safety— the most fundamental responsibility of a medical team's job— and also to the safety and support of clinical staff, who do the demanding work of treating and supporting suicidal patients (Zero Suicide Institute, 2018). This framework was pilot tested at five Air Force Military Treatment Facilities (MTFs), and they include the following:

Throughout the implementation of the ZSSA Pilot Project, AFMRA and the Clearinghouse have worked to make deliberate and demonstrable progress towards the goal of eliminating suicides within the Air Force. Although many additional efforts have taken place (see activities completed section of this report), broad level progress includes the following:

Lead. Implementation teams were formed at each installation with suicide prevention champions from disciplines across the MTF. Waivers to Air Force Instructions (AFI) were granted for pilot sites, which demonstrates leadership support for pilot testing evidence-informed protocols and processes.

Train. Over 4,000 MTF staff members were trained at five pilot sites on screening for suicide using the Columbia Suicide Screener. In addition, all mental health and behavioral health staff were trained in assessing suicide using the Columbia Suicide Assessment, Assessing and Managing Suicide Risk (AMSR), Safety Planning, Reducing Access to Lethal Means, and Cognitive Behavioral Therapy for Suicidal Patients (CBT-SP).

Identify. At the five ZSSA pilot bases, every patient should be screened for suicide risk at every clinical encounter. This screening should follow the implementation of new suicide-risk screening protocols. All Air Force Mental Health Clinics are now using the Columbia Suicide Screener and the Columbia Suicide Assessment.

Engage. When risk is identified, patients are engaged in appropriate pathways to care by using clinic- and base-specific triage points. This includes enrollment in the Suicide Risk Management Pathway (SRMP) and enrollment in suicide-specific case management services.

Treat. New Mental Health Documentation templates were pilot tested and rolled-out. These templates streamline the required documentation process and prioritize treatment. The Air Force has trained all mental health providers at each pilot base in Cognitive Behavioral Therapy for Suicidal Patients. Refined and improved Safety Planning interventions are being used in Mental and Behavioral Health across pilot bases.

Improve. The Air Force is using data-driven continuous quality improvement to advance patient outcomes and provide the best care for those at risk for suicide. At our five pilot bases, decreases in suicide deaths have occurred.

As of December 2019, suicide attempts, suicide deaths, and psychiatric inpatient hospitalizations are lower at the five ZSSA pilot bases than at comparison bases. **Further analysis shows that over the course of this project (2015 – 2019), participation in the pilot program was associated with a statistically significant decrease of suicide death rates**. These results have been achieved during a time when Air Force suicides, in general, have been increasing (Losey, 2020; Svan, 2020). Thus, there is preliminary evidence that ZSSA may be having a positive impact on suicide-related outcomes. In comparison, no other recent efforts, noted to date, used to reduce military suicides have made a difference. Additional details of project results can be found in the results section of this report and are organized into fidelity data, suicide death data, data regarding suicide attempts, and data regarding psychiatric inpatient hospitalizations.

The results and efforts of the ZSSA Pilot Project point to multiple successes, several challenges, and many lessons learned. Taking each of these items into account, the Clearinghouse puts forth the following options and recommendations.

Option One. Not recommended. The first option states that the Air Force do nothing with the information learned from this ZSSA Pilot Project and continue to conduct medical operations in the same way. Although this is an option, the Clearinghouse does not recommend this choice. Rather, the lessons learned from the ZSSA Pilot Project should be utilized to continue to advance the care of Airmen who are at risk for suicide and their families.

Option Two. Recommended only if DHA buy-in is achieved. The second option is that AFMRA utilizes the results of the ZSSA Pilot Project to implement ZSSA across the entire Air Force. This would require a great investment of resources. However, if the effort was shared by the entire Air Force medical team (i.e., not just the AFRMA Mental Health Branch), implementing ZSSA at all 76 Air Force MTFs would require less time and resources for a single branch or wing then it did to conduct the ZSSA Pilot Project. Practical lessons learned from Centerstone Behavioral Health and the Institute for Family Medicine indicate that a system-wide adoption may be more successful than only implementing the program at several bases. If the Air Force chooses this option, training, policy, procedures, and practices could be championed across all AFMRA sections and support could be spread across the Air Force in such a way that true culture change may occur. Note, it appears that DHA will likely have direct operational control of many medical resources in the near future. This recommendation may not be feasible unless the DHA is supportive and buys into this system's approach.

Option Three. Recommended. This option would involve the use of sustainable and feasible promising practices from the ZSSA Pilot Project across all Air Force MTFs. These promising practices include employing the Mental Health Documentation template, the Columbia Suicide Screener, and the Columbia Suicide Assessment, which have already been implemented in Mental Health Clinics across the Air Force. This third selection appears to be the most feasible and sustainable option given that much is still unknown about what is within AFMRA's scope versus within the scope of DHA. If this option is chosen, the Clearinghouse recommends the following:

Recommended Practice One: Universal Screening
The Air Force should adopt universal screening using the Columbia Suicide Screener at every clinical encounter across all MTF clinics. This is an essential tenant of any Zero Suicide effort, has been demonstrated to reduce suicide rates, and appears to have been successful in the ZSSA Pilot Project.

Recommended Practice Two: Suicide Risk Management Pathway
The Air Force should adopt the use of the SRMP, including the suicide-specific case management positions, where possible. This pathway provides clear directions for providers and patients on what to expect and what steps to take regarding the care and management of patients at risk for suicide.

Recommended Practice Three: Brief-Safety Planning
The Air Force should adopt the use of the Brief Safety Planning Tool (BSP-T) that can be utilized within Primary Care Clinics, and all specialty clinics, when a low- or intermediate-risk of suicide is identified in a patient.

Recommended Practice Four: Prioritize Treatment
Irrespective of any other recommendations, the Air Force should actively promote a shift from hospitalization towards out-patient care for the majority of patients who are suicidal. Initial qualitative interviews and data on the use of CBT-SP within clinics indicate that the Air Force still has a culture that prioritizes hospitalizing suicidal patients over providing them with evidence-based treatments within the Mental Health Clinic. Evidence is clear that hospitalization does not reduce suicidality and may even make it worse.

Recommended Practice Five: Build a System for Continuous Quality Improvement
The Air Force should invest a substantial amount of time and resources into building a system for continuous quality improvement. Continuous quality improvement has been the most difficult component of the ZSSA Pilot Project due to the lack of ability to get data out of the Air Force's EHR. A successful electronic records system would enable AFMRA leadership to inquire about a topic and receive data-driven information in a reasonable time period. For example, in a successful system, AFMRA would be able to ask an analytic team for the percentage of individuals who are being screened for suicide risk within primary care clinics. If that data were pulled in a reasonable time period, AFMRA leadership could then make timely, data-informed decisions about how to improve the screening of individuals (e.g., additional training, reminding clinics of the policy, changing the way results are documented). Thus, a successful system for continuous quality improvement would provide AFMRA with the ability to make data-informed decisions on many facets of medical care – not just suicide prevention. Without timely analytics, AFMRA is forced to make and implement policy without real-time data.