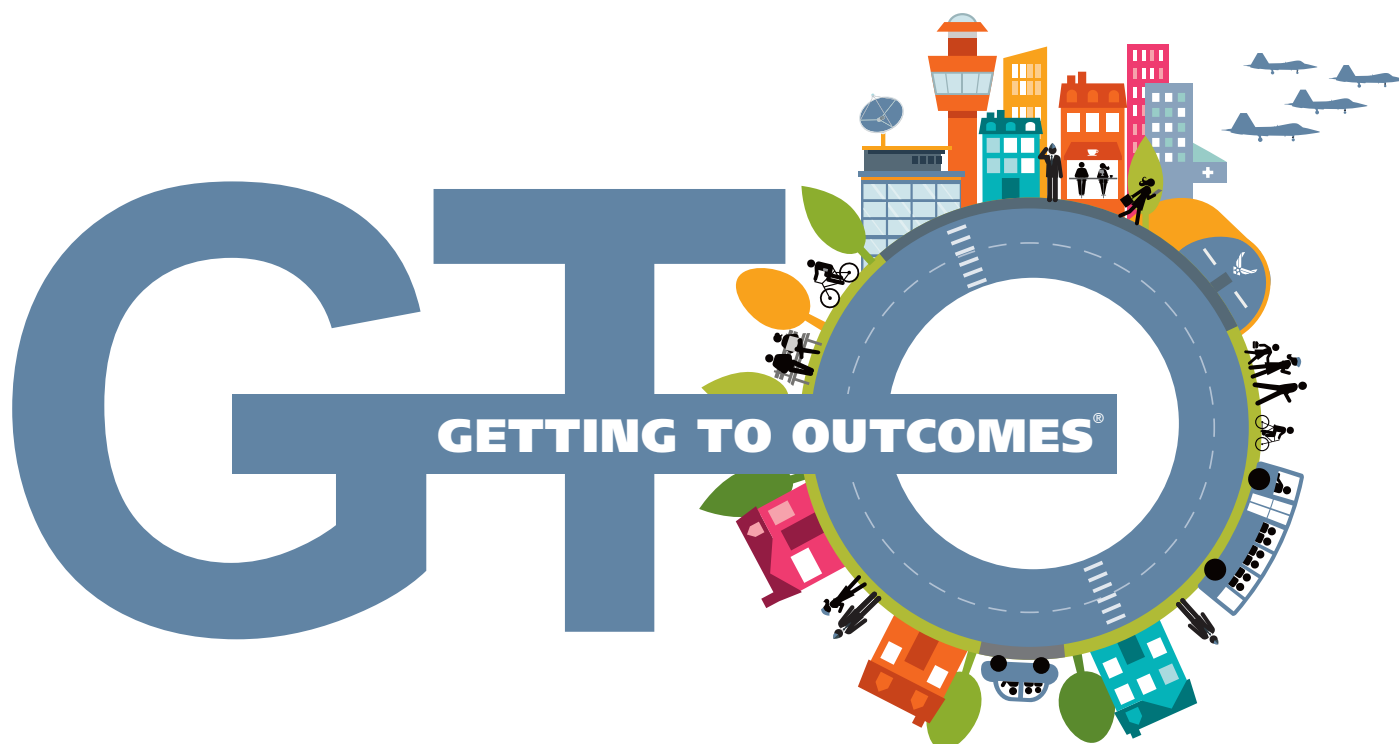


OPERATIONS GUIDE FOR

Content Area Module for Air Force Suicide Prevention

Patricia A. Ebener



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PREFACE

Suicide is the leading cause of Airman death. Not only is the loss of life tragic, but the impact on family, friends, fellow Airmen, and unit readiness is profound. The Air Force and other military services have made reducing suicides a priority.

This Content Area Module (CAM) for Air Force Suicide Prevention is a companion volume to the Getting To Outcomes[®] (GTO) Operations Guide for Air Force Community Action Teams. It includes guidance and resources for Community Action Teams that have an interest in planning, implementing, and evaluating suicide prevention initiatives. It was requested by the Air Force Integrated Resilience Office. This CAM is intended to be used with the GTO Operations Guide for planning a suicide prevention initiative as part of a Community Action Plan (CAP).

GTO is a user-oriented ten-step process for comprehensive planning, implementation, and evaluation of programs and community initiatives. It is designed to help organizations run programs well and get desired outcomes. It was developed to bridge the gap between the research evidence of effectiveness, established by program developers, and the often ineffective implementation of the same programs outside a research setting.

The GTO Operations Guide for Community Action Teams and four companion CAMs are designed for the U.S. Air Force Community Action Teams to aid each installation in developing its CAP for Integrated Resilience and Violence Prevention, as directed in Air Force Instruction (AFI) 90-5001. The documents contain tools that will help installations' Community Support Coordinators, Community Action Team Chairs, Violence Prevention Integrators, Community Action Teams, and the Community Support Program Managers at the major command level complete each GTO step. GTO is part of an Air Force initiative to increase the effectiveness of plans while enabling each installation to address its unique needs.

The research reported here was commissioned by the U.S. Air Force Integrated Resilience Office under the Deputy Chief of Staff for Manpower, Personnel and Services, Headquarters U.S. Air Force, and conducted within the Manpower, Personnel, and Training Program of RAND Project AIR FORCE as part of a fiscal year 2019 project, "Getting to Outcomes for Integrated Violence Prevention and Resilience in the Military: Phase Two." The views expressed in this document are those of the authors and do not reflect the official policy or position of the U.S. Department of Defense or the U.S. government.

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This CAM documents work originally shared with the U.S. Air Force during trainings in June and August 2018 in San Antonio, Texas. The draft, issued in December 2018, was reviewed by formal peer reviewers and U.S. Air Force subject-matter experts.

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Several individuals contributed to this content area module as reviewers of interim and final drafts and coordinated the review process. Their thoughtful comments and suggestions are much appreciated. In particular, we would like to thank Col. Christopher Robinson, USAF, HAF A1Z; Laurie Martin; Karen Osilla; and Rajeev Ramchand.

Abbreviations

ACE	Ask, Care, Escort
ADAPT	Alcohol and Drug Abuse Prevention and Treatment program
AF	Air Force
AFB	Air Force Base
AFCCARS	Air Force Chaplain Corps Activity Reporting System
AFSPP	Air Force Suicide Prevention Program
CAB	Community Action Board
CAM	content area module
CAP	Community Action Plan
CAT	Community Action Team
CDC	Centers for Disease Control and Prevention
CFT	Community Feedback Tool
CSC	Community Support Coordinator
CSPM	Community Support Program Manager
CY	calendar year
DoD	U.S. Department of Defense
DoDSER	Department of Defense Suicide Event Report
DSPO	Defense Suicide Prevention Office
GTO	Getting To Outcomes
P ⁴	program, policy, practice, or process
QPR	Question, Persuade, Refer
SELRES	Selected Reserves
SMART	specific, measurable, achievable, realistic, time based
SP	suicide prevention
SPPM	Suicide Prevention Program Manager
VA	U.S. Department of Veterans Affairs
VPI	Violence Prevention Integrator

Introduction

BACKGROUND ON GETTING TO OUTCOMES GUIDE AND CONTENT AREA MODULES

This Content Area Module (CAM) for Air Force Suicide Prevention (SP) is a companion volume to the Getting To Outcomes® (GTO) Operations Guide for U.S. Air Force Community Action Teams (CATs). It includes guidance and resources for CATs that have an interest in suicide prevention.

The main volume of the GTO Operations Guide (see www.rand.org/t/TL311) provides tools and resources for using GTO to plan, evaluate, and improve any integrated resilience and violence prevention *program, policy, practice, or process (P⁴)* that a CAT is interested in, including in its Community Action Plan (CAP). The guide leads CATs through the ten steps of GTO, shown below, and provides supplemental information and resources to support implementation of integrated resilience and violence prevention P⁴. It is a sequence of overviews, tools, and additional resources for each GTO step.

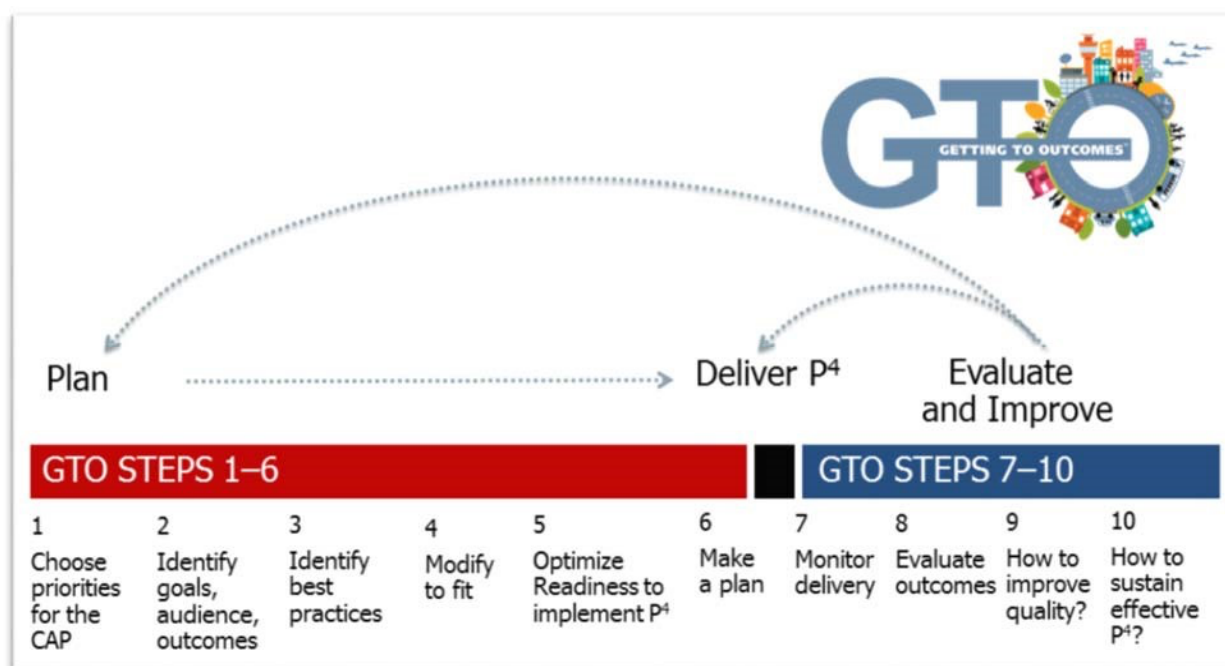


Figure I-1. The Ten Steps of Getting To Outcomes

GTO is currently being incorporated into U.S. Air Force (USAF) guidance for completing the 2019–2020 CAPs. Although the guide offers a range of resources and instructions for completing the GTO steps, it does not go into depth about how to apply GTO to any specific substantive area. CAMs, like this one, that accompany the GTO guide provide significantly more depth in four domains: suicide prevention, sleep health promotion, sexual harassment prevention, and workplace stress prevention and reduction. This CAM is intended to be used with the GTO guide for planning a suicide prevention P⁴ as part of a CAP.

THE NEED TO PREVENT SUICIDE IN THE AIR FORCE

Airmen often experience intense stress from ongoing challenges, including uncertainty about deployments, combat experiences, difficult living conditions, separation from friends and family members, frequent relocations, and long work hours (Bryan et al., 2015; Lineberry and O'Connor, 2012; Griffith, 2017). These stressors can exact a heavy toll on Airmen and their units in the form of mental illness (depression, anxiety, posttraumatic stress disorder), substance abuse, family problems, and physical injury (Bryan et al., 2015; Bryan et al., 2010; Pierce, Lewandowski-Romps, and Silvershantz, 2011). One of the most-troubling outcomes is suicide. Not only is the loss of life tragic, but the impact on family, friends, fellow Airmen, and their unit's readiness is profound.

Suicide is the leading cause of Airmen death. From August 2015 to August 2016, 45 percent of Active Duty and Reserve Airmen deaths were due to suicide (U.S. Air Force, 2018). Between January and June of 2018, 33 Airmen died by suicide¹ (U.S. Department of Defense [DoD] Defense Suicide Prevention Office [DSPO] Quarterly Suicide Report, CY 2018 2nd Quarter). In 2017, the most recent year for which the data were available, the suicide rate for the Active Duty component of the Air Force was 19.3 individuals per 100,000. By comparison, the Active Duty suicide rate was 24.3 for the Army, 23.4 for the Marine Corps, and 20.1 for the Navy (2017 Department of Defense Suicide Event Report [DoDSER]: U.S. Department of Defense, 2018). The suicide rate in the U.S. general population during this time was 14.0 per 100,000 individuals (Hedegaard, 2018). After adjustments for age and sex, the suicide rate for Active and Reserve Air Force was no different from the U.S. population rates (U.S. Department of Defense, 2018). However, these comparisons are limited because the military and the national population also differ in racial composition and other factors and because "the procedures for reporting suicide data also vary, both between states and regions and between the nation and DoD" (Ramchand et al., 2011).

The characteristics of Airmen who die by suicide closely reflect the overall makeup of the Air Force (U.S. Department of Defense, 2018). In 2017, 63 Airmen died by suicide, and 420 non-fatal suicide attempts were reported. 58 of the 63 Airmen who died by suicide were Active Duty; two were Selected Reserve (SELRES) service members; and two were National Guard members. The most common demographic characteristics were white racial identity, (82.5 percent), non-Hispanic ethnicity (90.5 percent), male biological sex (96.8 percent), high school graduates (52.4 percent), and age between 20 and 30. As in all the services, the most common method of suicide in the Air Force was death by firearms (68.3 percent; U.S. Department of Defense, 2018). In the Air Force, 95.3 percent of the firearms used in suicides were personal possessions, not military-issued weapons.

SUICIDE RISK AND PROTECTIVE FACTORS

Understanding suicide is not easy. There are many factors that contribute to suicide, and the complex pathways to this tragic outcome are not yet well understood. However, numerous studies have identified the risk and protective qualities of individual- and community-level factors, as well as the role of relationships with coworkers, friends, and family. Risk factors increase the likelihood for suicide, while protective factors help strengthen, support, and protect

¹ The DoDSER includes only those Reserve members who were on duty status at the time of death.

individuals against suicide (U.S. Department of Health and Human Services Office of the Surgeon General and National Action Alliance for Suicide Prevention, 2012).

Table I-1 summarizes research on which factors at the community, relationship, and individual levels are associated with either greater risk or protection (indicated by the checks).² More details on risk and protective factors and references for this table are provided in Appendix A.

Table I-1. Community, Relationship, and Individual Suicide Risk and Protective Factors Associated with Suicide Death, Attempts, and Ideation

Level	Factor	Promotes Risk ^a	Provides Protection ^b
Examples of community factors	Local clusters of suicide	✓	
	Poor community adjustment	✓	
	Stigma associated with asking for help	✓	
	Cultural and religious beliefs, such as the belief that suicide is a noble resolution of a personal dilemma	✓	
	Cultural and religious beliefs that discourage suicide and support self-preservation		✓
	Community support while in theater		✓
	Effective health care, especially mental health and substance abuse treatment	✓ Lack of	✓ Access to
	Regional gun availability	✓	
Examples of relationship factors	Intimate partner violence and child abuse	✓	
	Poor workplace adjustment	✓	
	Family connections and adjustment	✓ Poor	✓ Strong
	Relationship problems	✓	
	Exposure to others who died by suicide (real life or via the internet)	✓	
	Support through ongoing medical and mental health care		✓

² The purpose of this table is to describe the range of risk and protective factors that have been associated with suicide death, attempts, and ideation. This table does not account for the strength of the relationship, nor does it distinguish whether the factors are linked to suicide ideation, attempts, and/or death.

Level	Factor	Promotes Risk ^a	Provides Protection ^b
	Social support	✓ Lack of	✓ Strong
Examples of individual factors	Hazardous drinking	✓	
	Gun ownership	✓	
	Prescription drug misuse	✓	
	Depressive symptoms	✓	
	Exposure to killing or atrocity during deployment	✓	
	Multiple deployments	✓	
	Chronic pain	✓	
	Mild traumatic brain injury	✓	
	Access to lethal weapons	✓ Easy access	✓ Restricted access in times of crisis
	History of trauma or abuse	✓	
	Previous suicide attempts	✓	
	Poor personal adjustment	✓	
	Family history of suicide	✓	
	Problem-solving and conflict resolution skills		✓
	Frequent transitions	✓	
	Sexual harassment and assault	✓	
^a Lorber, Heyman, and Smith Slep, 2017; Bryan et al., 2015; Lineberry and O'Connor, 2012; Van Orden et al., 2010; Brenner and Barnes, 2012; Anestis and Houtsma, 2017. ^b Bryan et al., 2010; Nock et al., 2013.			

AIR FORCE APPROACHES TO SUICIDE PREVENTION

The Air Force and other military services have made reducing suicides a priority. The Air Force launched its 11-component Air Force Suicide Prevention Program (AFSPP) in 1996. An independent evaluation of the AFSPP found decreases in homicide; family violence, including severe family violence; and accidental death, as well as reduction in suicide associated with program participation (Knox et al., 2003). Since then, annual training requirements for new Airmen, all Airmen, and leadership have been implemented. In 2019, the Air Force will enter a sustainability phase for Airmen bystander training called Empowering and Equipping Wingmen, which will also apply to all Airmen and civilian employees (see AFI 90-505, May 18, 2017). In addition, DoD (see DoDI 6490.16, November 6, 2017) and the Air Force have announced new

enterprise-wide P⁴ aimed at physical solutions that improve the safety of lethal means. The Air Force calls this approach *time-based prevention*, which refers to P⁴ that aim to put time and space between an individual's impulse to die and the lethal means to follow through. Installations will have the opportunity to support this policy at the local level by promoting gun locks and on-base central storage for personal weapons. Another new goal of the Air Force is to make mental health assessment mandatory for all Airmen under investigation for violations of the Uniform Code of Military Justice (UCMJ). Finally, the Air Force has set a goal of greater involvement of Air Force spouses as gatekeepers for needed services for their Airmen.

WHAT INSTALLATIONS CAN DO TO PREVENT SUICIDE

There is strong consensus among experts that suicide prevention should be comprehensive rather than narrowly focused (Ramchand et al., 2011). The AFSPSP adopted this approach with 11 integrated strategies for suicide prevention that include leadership involvement and guidance for commanders on the use of mental health services and their role in encouraging help-seeking; education on suicide prevention at all levels of the Air Force Active Duty, Reserve, Guard and civilian employee communities; community preventive services and education; policies and procedures related to high-risk scenarios; installation-level dedicated personnel; and data monitoring and data privacy protocols. More recently, the AFSPSP has continued to evolve its integrated approach with a focus on culture change, policy change, and physical solutions. The recently published Centers for Disease Control and Prevention (CDC) technical package *Preventing Suicide: A Technical Package of Policy, Programs, and Practices* makes the same point—that suicide is connected to other forms of violence (Stone et al., 2017).

In summarizing the literature and consultations with experts in the field for a RAND report on suicide in the military, Ramchand et al., 2011, reported that comprehensive suicide-prevention programs should include the following six practices:

- 1. Raise awareness and promote self-care.** There is evidence that a focus on skill-building, such as knowing when and how to seek help and building personal coping strategies, may be important at all stages of prevention. Reducing known risk factors—for example, by seeking help for substance use and mental health challenges—is often included as one aspect of integrated approaches.
- 2. Identify those at high risk.** Selected or indicated prevention is a fundamental component of a public health approach to disease prevention and is predicated on identifying those at higher risk. Thus, a comprehensive suicide-prevention program should have means by which this may occur, such as screening for mental health challenges (one of the strongest risk factors for suicide) in primary care or through the use of gatekeepers.
- 3. Facilitate access to quality care.** Access to quality behavioral health care is an integral component of many suicide-prevention programs. Several barriers obstruct such access—in particular, the stigma around seeking help for mental health challenges. Although reducing barriers to mental health care has not been specifically correlated with reducing suicides except as part of broad, integrated programs, facilitating access to effective care will help ensure that those at increased risk will receive quality care and, thus, should reduce suicides.
- 4. Provide quality care.** For suicide prevention, quality care means providing mental health interventions and suicide-reduction strategies that have the strongest empirical support for

effectively preventing suicide. The need to ensure quality of behavioral health services is a critical and often overlooked component of suicide prevention.

5. Restrict access to lethal means. There is evidence that restricting access to lethal means is an effective way to prevent suicide. Lethal means can include weapons; toxic substances, including controlled pesticides or pharmaceuticals; large quantities of over-the-counter medications; high bridges without safeguards; and others. Universal means restriction (strategies that restrict access to lethal means for everyone) might be difficult to implement in the U.S. military, with weapons and other lethal means readily available to service members. However, selected or indicated programs that limit the availability of lethal means to persons deemed to be at high risk of suicide should be considered.

6. Respond appropriately. Given evidence of possible imitative suicides, suicide prevention programs must have in place a strategy for responding to a suicide. Such a strategy should focus on how details of the suicide are communicated in the media, as well as how the information is passed on to groups to which the deceased individual belonged (e.g., classmates, colleagues, military unit). Responding appropriately can include responsible reporting that does not dwell on the details or method of suicide, does not imply that the suicide was the result of a single factor, does not frame the suicide as a natural or expected response to stressors, and does provide information on resources and support for others who may be struggling. Responding appropriately can also include providing services and support to those affected by the suicide, such as friends and family members.

Promote Resilience. Another strategy for preventing suicide that was not included in the review by Ramchand et al., 2011, but is increasingly discussed among military leadership is the promotion of *resilience*, or the ability to overcome or cope with stressors and be capable of meeting challenges and surviving threats. Resilience promotion is another high-priority P⁴ of the Air Force (see AFI 90-506, *Comprehensive Airman Fitness*, April 2, 2014). Like risk factors, protective factors against suicide and interpersonal violence often overlap. The CDC's *Preventing Suicide: A Technical Package of Policy, Programs, and Practices* (Stone et al., 2017) notes that "connectedness to one's community, school, family, caring adults and pro-social peers can enhance resilience and help reduce risk for suicide and other forms of violence." Focusing on programs that **promote resilience** may be one way to combat the stressors and suicide risk factors associated with military life (Meadows, Miller, and Robson, 2016). Some have suggested strategies to increase resilience that include promoting regular unit physical activity and holding commanders accountable for the physical fitness of military personnel, increasing the resources and capacity of Health and Wellness Centers to provide targeted interventions, increasing the sharing of resilience-related data and resources, and improving data collection and strengthening the Comprehensive Airman Fitness Office (Meadows, Miller, and Robson, 2016). These strategies need further assessment to determine their efficacy.

The CDC has also documented the synergy possible among different types of P⁴ in *Preventing Suicide: A Technical Package of Policy, Programs, and Practices* (Stone et al., 2017). These strategies are intended to guide community practitioners, leaders, and policymakers from diverse sectors to select and implement suicide prevention strategies based on the best available evidence. Table I-2 shows the strategies and approaches from the CDC Technical Package.

Table I-2. CDC Preventing Suicide Framework

Strategy	Approach
Strengthen economic supports	• Strengthened household financial security • Housing stabilization policies
Strengthen access and delivery of suicide care	• Coverage of mental health conditions in health insurance policies • Reduction of provider shortages in underserved areas • Safer suicide care through systems change
Create protective environments	• Reduction of access to lethal means among persons at risk of suicide • Organizational policies and culture • Community-based policies to reduce excessive alcohol use
Promote connectedness	• Peer norm programs • Community engagement activities
Teach coping and problem-solving skills	• Social-emotional learning programs • Parenting skill and family relationship programs
Identify and support people at risk	• Gatekeeper training • Crisis intervention • Treatment for people at risk of suicide • Treatment to prevent re-attempts
Reduce harm and prevent future risk	• Postvention, such as bereavement services • Safe reporting and messaging about suicide

SELECTING EFFECTIVE SUICIDE PREVENTION P⁴. P⁴ to prevent suicide usually aim to reduce suicide risk factors and/or promote protective factors. There are many suicide prevention P⁴ that installations can consider implementing. In some cases, this may mean implementing a new training or a new community engagement or social media campaign. In others, it could be to provide support for existing P⁴ or enforcement of new Air Force policies, such as time-based prevention.

However, it is important to note that some suicide prevention strategies are more effective than others. A review of the available evidence for all populations found that restricting access to lethal means (such as firearms, analgesics, and hot spots for jumping), school-based awareness programs, and pharmacological (i.e., clozapine and lithium) and psychological treatments for depression have the strongest evidence base (Zalsman et al., 2016). Other strategies also have found positive outcomes, as discussed in Appendix B.

Less is known about the efficacy of specific suicide prevention P⁴ with military populations. A review of military suicide prevention programs prior to 2015 found only five published studies (Harmon et al., 2016). Of these five, the only study with compelling evidence for a reduction in suicide risk was the 11-component AFSPPP (Harmon et al., 2016; Knox et al., 2003). The Air Force study found decreases in homicide; family violence, including severe family violence; and accidental death, as well as reduction in suicide associated with program participation (Knox et al., 2003).

More-recent research suggests that certain types of mental health interventions, such as cognitive behavioral therapy and crisis response planning, may be effective in preventing suicidal behavior among military personnel (Bryan et al., 2017). Recent evidence also suggests that combining programs—particularly those that reduce weapon availability and build awareness and skills to improve and destigmatize help-seeking—appear to be effective in decreasing suicide in the military (in at least one case, by up to 57 percent; Shelef et al., 2016).

To date, there is not enough evidence to determine whether primary care screening programs, public education campaigns, and media guidelines are effective in preventing military and civilian suicides (Zalsman et al., 2016). Gatekeeper training, physician education, and internet and helpline support programs also need further evaluation (Zalsman et al., 2016). This does not mean that these programs are not effective, especially if implemented as part of a holistic program for suicide prevention; rather, more-rigorous studies are needed to provide compelling evidence for their effects. These types of P⁴ generally have low ratings in registries that evaluate evidence and are not considered evidence-based P⁴.

Although the evidence of effectiveness of many strategies is limited, especially for the military population, some have been identified as “Promising Practices.” These practices are not considered evidence-based but have shown some signal that they work (through research or other type of evaluation). Ratings of “promising” or “effective” are assigned by clearinghouses that review a program’s evidence base, such as the Clearinghouse for Military Family Readiness at Penn State and the Substance Abuse and Mental Health Services Administration’s (SAMHSA’s) National Registry of Evidence Based Practices.

The list of eight types of community-based suicide prevention P⁴ in Table I-3 is adapted from the RAND Suicide Prevention Evaluation Toolkit (Acosta et al., 2013). In Step 3, a series of tables summarizes the evidence base for specific P⁴ that have been shown to have some level of efficacy in preventing suicides. Appendix B provides more description and a summary of the research for each of the types of P⁴ below.

Table I-3. Types of Suicide Prevention P⁴

Type	Main Activity
Gatekeeper and bystander training	Train individuals (e.g., family, peers, fellow Airmen, clergy) to recognize individuals at risk for suicide and help them obtain services to lower their risk
Crisis hotlines	Provide telephone (and text) support to individuals in crisis or to concerned family or friends by assessing risk and establishing a plan for the safety of someone at risk for suicide
Marketing campaigns and social media campaigns	Provide information on signs and symptoms associated with suicide or resources available to prevent suicide, such as crisis hotlines
Time-based prevention	Enforce policies or procedures that restrict access to lethal means (e.g., guns, lethal medications) or create a safer physical environment for individuals at risk for suicide
Clinical mental health interventions	Provide mental health treatment

Type	Main Activity
Appropriate postvention response	Respond appropriately in the aftermath of a suicide
Provider training	Train mental health providers to screen for and assess suicide risk or treat patients at risk for suicide
Coping skills and self-referral training	Train individuals to cope with stress or self-refer if they are at risk for suicide

In addition, **new technology** is being developed that takes advantage of developments in smartphones, facial recognition software, and the ability of big data to predict rare events (Larsen, Nicholas, and Christensen, 2016). For example, a digital cognitive-behavioral therapy app (dCBT) designed for medical school interns was reported in the Journal of the American Medical Association (JAMA) to reduce suicide risk throughout medical school internships (Guille et al., 2015). New technology developments can generally fit into all of the above categories.

OVERVIEW OF CAM CONTENT

This CAM walks the user through a hypothetical scenario with examples of completed GTO tools for suicide prevention. The examples presented here relate to a hypothetical scenario at a fictional Air Force installation, Townville Air Force Base (AFB). The examples reflect the work of Townville AFB's CAT, which used GTO to consider multiple suicide-related problems, select best practice P⁴ for consideration, and plan and prepare to evaluate their selected P⁴. In this case, they chose to implement Ask, Care, Escort (ACE), a real suicide prevention program developed by the Army and adopted by the Air Force. ACE is a gatekeeper program that trains service members, spouses, and family members to intervene with individuals at risk of suicide and encourage them to seek help. The scenario involves the preparation of the installation's 2019–2020 CAP. Together with their CAT, Townville AFB's Community Support Coordinator (CSC) and Violence Prevention Integrator (VPI) completed the CAP for Integrated Resilience and Violence Prevention using the GTO framework. They received training and support from their MAJCOM Community Support Program Manager (CSPM). Throughout the process, they updated the installation's Community Action Board and incorporated its feedback. The examples of completed GTO tools for ACE, included in this CAM, are provided to illustrate the instructions included in each chapter of the guide. Although the CAT members and Townville AFB are fictional, the remaining details are as realistic as possible. That is, the information about existing data sources, suicide prevention P⁴, and the evidence supporting them are correct to the best of our knowledge.

This CAM contains a chapter for each GTO step. Each chapter contains

- ✓ an overview of the GTO step as carried out by the fictional Townville AFB CAT, described above
- ✓ tips and resources  specific to suicide prevention
- ✓ an example of completed tools for each GTO step.

For each GTO step, the CAM documents the work of the Townville AFB CAT and how it used resources included as tips in this CAM.

A series of appendixes provides additional detail on different types of suicide prevention P⁴, using suicide statistics, and risk and protective factors. The bibliography is organized by type of P⁴ for ready access to the references included in the Step 3 tables of programs.

As noted above, this CAM is a companion volume to the GTO guide, which contains more-detailed instructions for how to complete each step, additional tips and resources for each step, and blank tools. For example, the GTO guide contains guidance for selecting an evaluation design, identifying outcome measures, and reporting evaluation results. The two documents are intended to be used together.

Chapter One

GTO Step 1—Problems and Resources Assessment for a Suicide Prevention P⁴

In the Townville Air Force Base (AFB) scenario, its **Community Action Team (CAT)** identified several factors that led to its decision to address suicide prevention as a priority for its **Community Action Plan (CAP)**:

- The team knew that reducing suicide deaths among Airmen and their families is a DoD and Air Force priority (DoDI 6490.16; AFI 90-505) and knew that annual training requirements for civilian and active duty Airmen would be included in the CAP.
- Compared with other installations, Townville AFB has had an above-average number of suicide deaths in recent years, according to the local installation's VPI and Suicide Prevention Program Manager (SPPM), who have access to quarterly statistics on local suicides. The Wing Commander has expressed concern about this trend at Community Action Board (CAB) meetings during the past year.
- Quarterly reports from the Director of Psychological Health also have shown that the number of inpatient hospitalizations for suicide attempts has increased.

To complete **GTO Step 1**, the CAT reviewed information from installation-level data sources, like those shown in Tip 1-1, to learn about the prevalence of suicide risk and protective factors at Townville AFB. The team also referred to the list of risk and protective factors for suicide given in the Introduction. Installation-level data sources revealed a prevalence of additional risk factors for suicide, including

- reports from the Alcohol and Drug Abuse Prevention and Treatment program (ADAPT) that showed elevated incidents of driving under the influence (DUI) arrests
- a recent Community Feedback Tool (CFT) that indicated that Airmen were experiencing problems in many areas of their lives, but few had contacted any military or non-military agencies for help. Instead, they indicated that they would turn to family.
- a focus group with spouses and partners of Airmen that found that they felt ill-equipped to identify warning signs of suicide or support a partner who exhibited warning signs.

The CAT entered this and other relevant information into the **Data Catalog Tool**. The ADAPT and CFT data were from existing data sources, and the focus group was a new source of data that the CAT collected.

Using the **Community Resources Assessment Tool**, the team considered existing resources offered through partner agencies to avoid duplicating effort. Although Townville AFB had several helpful resources available, none were specifically aimed at preventing suicide. From these tools, the team concluded that the initial concern about the base's above-average suicide rate was valid and that the approach of preparing spouses and partners to support Airmen at risk of suicide was not already being implemented. Team members also decided that they may want to partner with some of the Wingman Day activities to engage spouses.

In the **Triaging Among Problems Tool**, the CAT summarized some of the main concerns illuminated in the **Data Catalog Tool**. The CAT used the Triaging Among Problems Tool to narrow down which of the identified problems seemed most feasible to tackle. This helped the CAT

- consider other problems that were identified in the Data Catalog Tool
- rule out problems that the CAT was not able or did not want to address at the moment
- determine that the priority need was improving the quality of spousal and partner support for Airmen
- determine that addressing the need was consistent with new Air Force goals to engage spouses as gatekeepers.

The CAT realized that the strongest suicide prevention strategies are typically multi-pronged, integrated approaches. However, given its limited resources, the team decided that the most feasible plan was to tackle a specific problem—that Airmen who exhibit warning signs of suicide are not being identified, and their spouses and partners do not know how to talk to them about suicide.

The CAT also knew that the Total Force Annual Bystander Training requirement for Airmen would be part of its CAP and discussed how engaging spouses and partners could complement that training.

The rest of this CAM follows Townville AFB's CAT through the process of using GTO to develop a plan to address this priority problem. The CAT chair, Townville AFB's CSC, fills out the GTO tools with support from the other CAT members.



Tip 1-1. Data sources to help you identify problems in your community

Installation-level sources:

1. The **Community Feedback Tool (CFT)** is a report on the results of a biannual community needs assessment conducted across all Air Force installations. Reports are available every two years, and the report was provided to your MAJCOM CSPM and VPI in May 2018.
2. The **Director of Psychological Health or Suicide Prevention Program Manager (SPPM)** can provide quarterly aggregate data on suicides and suicide-related data trends, risk factors, and known warning signs; the number of psychiatric inpatient hospitalizations; and the number of high-interest patients being treated within the Mental Health Flight.
3. **Suicide numbers** to which VPIs have access are posted monthly on the Interpersonal and Self-Directed Violence (ISDV) Sharepoint site by A1Z.
4. The **Drug Demand Reduction Program (DDRP)** provides raw numbers on active duty and civilian drug test results by fiscal year and information on illicit drug use trends and concerns on an as-needed basis.
5. **Legal (Judge Advocate [JA])** provides aggregate quarterly data on the number and types of legal assistance visits (such as child custody and domestic relations) and aggregate military justice data, such as the number of Article 15s, court martials, and other relevant installation data and trends.
6. The **Sexual Assault Response Coordinator (SARC)** provides quarterly aggregate data on sexual assault trends, demographics, risk factors, and unrestricted/restricted report referrals. Top 5 Trends reports are provided semiannually.
7. The **Alcohol and Drug Abuse Prevention and Treatment (ADAPT)** program gathers local data on DUIs and other substance use-related arrests and incidents. Connect with your local ADAPT program for information about your installation.
8. **Family Advocacy Programs (FAP)** collect and report information quarterly about alleged and substantiated child and partner maltreatment in your community. Connect with your local FAP for community information, or view aggregated reports at www.militaryonesource.mil/reports-and-surveys.
9. The **Airman & Family Readiness Center (AFRC)** provides quarterly trends data on support services offered to Airmen and their family members (i.e. financial, transition, relocation, etc.). Information about concerns identified through leadership consultations, unit networking, and community partnerships is provided on an as-needed basis.
10. The **Chaplain Corps** provides quarterly data on the top five counseling trends from the AF Chaplain Corps Activity Reporting System (AFCCARS); aggregate quarterly data on suicide ideation, sexual harassment and assault, bullying (all types), and domestic violence (all types and financial problems); and additional data upon request.
11. **Community Action Team (CAT) and Community Action Board (CAB) meeting minutes** provide information on the issues and experiences of your installation community.

Air Force–Wide Sources:

You may want to compare your installation's risk or protective factors with Air Force averages to set goals for improvement, or you might consider looking at factors that generally need improvement across the Air Force. The following data sources provide averages on a variety of risk and protective factors across the Air Force.

1. The **Department of Defense Annual Report on Military Family Readiness** summarizes information from evaluations of military family readiness programs and policies, including youth programs, Spouse Education and Career Opportunities (SECO), nonmedical counseling, and Morale, Welfare and Recreation (MWR): www.militaryonesource.mil/reports-and-surveys
2. The **Blue Star Families Military Family Life Survey (aFMLS)** is the largest and most comprehensive survey of active duty service members, veterans, and their families. Annual surveys and reports cover the experiences and challenges encountered by military families, including the impact of deployment on children and families, military family quality of life, and service member and veteran suicide: www.bluestarfam.org
3. The annual **Department of Defense Suicide Event Report (DoDSER)*** provides information on all Air Force and other services' suicide rates and attempts, as well as descriptive information regarding lethal means and demographic characteristics: www.dspo.mil
4. **DoD Quarterly Suicide Reports** are the most accurate and up-to-date information on the number of suicide deaths by service and component: www.dspo.mil

* The DoDSER is not recommended as a source for information about relative risk and protective factors for suicide. See Appendix C for a description of the DoDSER and using suicide statistics.



Data Catalog Tool

Completed by: CSC with CAT input

Date: July

Risk Factors or Problem Areas and other gaps, e.g. resilience factors to be increased	Sources of Data	Existing or New Data	Person Responsible/ Date Due
1. The number of Airmen dying by suicide at Townville AFB has increased by 25% in the last three years.	Quarterly aggregate data on suicide trends and number of completed suicides	Existing	VPI or Suicide Prevention Program Manager (SPPM)/ June
2. The number of psychiatric inpatient hospitalizations for suicide attempts and Airmen considered to be "high interest" patients has increased, from 1% annually to 2.5%.	Quarterly data on the number of psychiatric inpatient hospitalizations; quarterly data on the number of high-interest patients treated within the Mental Health Flight	Existing	VPI or SPPM/ June
3. Airmen have had a significant increase in the number of DUIs on base (30% more in calendar year (CY) 2017 than in CY 2016).	Raw numbers of DUI incidents from ADAPT annual report	Existing	ADAPT CAT member/ month 1
4. Due to recent problems on base, 15 Townville Airmen have been court martialed or are under investigation so far in 2018, compared with 3 Airmen in 2017 and 0 in 2016.	Quarterly military justice data on number of court martials and Article 15s	Existing	Judge Advocate CAT member/ June
5. More than half (60%) of Airmen reported problems with mood (including depression and anxiety), but 30% of Airmen did not seek or access resources to help with their problems. More than a third (35%) of Airmen indicated that they would turn to personal networks outside the military (such as family).	CFT report	Existing	Community Support Coordinator/ June
6. Findings from two focus groups with Airman spouses and partners showed that, generally, spouses and partners did not feel that they knew how to recognize suicide warning signs and felt ill-equipped to support a partner in crisis.	Two focus groups with 6–8 Airman spouses and partners	New	VPI/ July



Community Resources Assessment Tool

Completed by: CSC with CAT input Date: July

	Resource 1	Resource 2	Resource 3
Name of resource and its services/ activities	ABC Military and Family Life Counselors	Wingman Day awareness activities	Townville AFB Mental Health Clinic
Location (Installation or Community)	Townville: services provided on or off base	Townville AFB	Second floor of Building 210 at the Townville AFB Medical Clinic
Target population served	Airmen and their families	Airmen	Airmen and their families
Hours of operation	M–F 0800 to 1630	N/A	M–F 0700 to 1600, closed on weekends, federal holidays, and family days. Closed on the first Thursday of each month for training until 1300.
Who uses it?	Typically Airman families with children	Informational posters and brochures are distributed, and community events promote awareness of suicide prevention resources	Airmen seeking counseling, ADAPT treatment, and domestic/family violence education and treatment

Community Resources Assessment Tool—Continued			
	Resource 1	Resource 2	Resource 3
Community risk factors addressed	Deployment/reintegration problems Parenting/sibling/family issues Stress/anxiety Grief and loss Marriage and relationships Life skills coaching	Lack of knowledge about available resources	Depression, anxiety, post-deployment concerns, other mental health concerns; drug and alcohol use; family functioning
Protective and resilience factors being promoted	Promotes family functioning and relationship support	Promotes awareness of available resources	Promotes family functioning; drug and alcohol prevention; promotes well-being and decreases negative mental health issues.
Any outcomes/evidence of effectiveness produced by the resource?	Spouse and child well-being, spouse and child education enrollment	None at this time	Unknown
What's working?	Anecdotally, families with children are receiving help with parenting skills and school support for children with behavioral issues	Unknown at this time	Anecdotally, family counseling and support is improving family functioning



Triaging Among Problems Tool

Completed by: CSC with CAT input Date: July

Triaging Process Questions	Problems to be addressed:		
1. List problems to be addressed.	Suicide warning signs exhibited by Airmen are not being identified, and when Airmen exhibit warning signs, spouses and partners do not know how to talk to them about it	Problematic alcohol consumption is a risk factor for suicide, and Townville AFB has experienced an increase in on-base DUIs	Increase in arrests leading to court martials
2. List capacities needed to address the problem	Airmen say that they would turn to family for help, suggesting the need for engagement strategies and a curriculum to help spouses know how to talk to partners who may be considering suicide.	Revise alcohol use policies to prevent alcohol misuse.	Improved training to instill Air Force cultural values around adhering to on-base rules.
3. Is this problem currently being addressed elsewhere (at the installation or neighboring community)?	No	No	No
4. Is this a problem that we lack the resources (time and budget) to confront?	No	No	Yes—due to lack of resources (time) to address at the moment.
5. Is this a problem that we cannot change or whose change we cannot measure?	No	No	No
6. Is this a problem that we choose not to address at this time?	No	Yes—revising base policies is beyond the scope of the CAT at this time.	Yes—CAT lacks the resources to address at this time.

Triaging Process Questions	Problems to be addressed:		
7. Is this a problem that our installation must address to comply with AF CAB or MAJCOM priorities?	Yes	Yes	Yes
8. Highlight the remaining problems with associated capacities and the mandated priorities. These are your priority problems.	Airmen who exhibit warning signs of suicide are not being identified, and when Airmen exhibit warning signs, spouses and partners do not know how to talk to them about it	Only this problem remains a priority problem; the CAT determined that the problems in the other two columns were not going to be addressed at this time using the filtering questions (questions 3 through 7).	
9. Specify your target population, including their characteristics and the approximate number for which you have resources, e.g. all Airmen or a more targeted group?	All spouses and partners of Townville AFB service members. About 3,000 total		



Chapter Two

GTO Step 2—Goals and Desired Outcomes for a Suicide Prevention P⁴

In **GTO Step 2**, the Townville AFB CAT began to complete the **Community Action Plan Overview Tool** and defined goals and desired outcomes in the **SMART Desired Outcomes Tool**. First, the team set a CAP goal of reducing suicides by improving spouse and family support for Airmen and family members. Using the guidance in Tip 3-1 in the *Getting To Outcomes® Operations Guide for U.S. Air Force Community Action Teams*, the team then set specific, measurable, achievable, realistic, and time-based (SMART) desired outcomes that would help achieve the goal.

Because the team had identified spouses' lack of knowledge about suicide warning signs as a priority problem in Step 1, it made increasing their knowledge by 50 percent a desired outcome. In the data collection efforts in Step 1, the team learned that spouses did not feel confident that they could intervene with a spouse at risk, so the CAT made improving spouses' confidence to intervene by 15 percent during CY 2019 another desired outcome. In its desired outcome statements, the team set outcomes that were specific, measurable, and time-based; the other SMART terms—achievable and realistic—did not directly contribute to the statement but served as checks to assess whether the desired outcome met the SMART criteria.

Using the **Community Action Plan Overview Tool**, the team began the process of building a logic model that linked its needs, resources, goals, and desired outcomes. The team presented this information to the CAB for feedback and buy-in.

Reduced Suicides as a Desired Outcome. A reduction in suicides may seem like the most obvious outcome for a suicide prevention program to track. However, three challenges associated with measuring suicide make it a poor choice for most P⁴.

1. Very few suicides occur per year in most communities. These low base rates in most communities can make it difficult to identify statistically meaningful program effects on suicide rates. For example, a difference between three suicide deaths in one year and two in the next could not be attributed to a specific intervention.
2. Long time frames are necessary to observe outcomes like a reduction in suicides.
3. As discussed above, suicide prevention often requires a P⁴ with multiple components implemented over a significant period of time (e.g., the AFSP) to detect effects on suicide rates.

These challenges make it difficult to find meaningful differences in the number or rate of suicides impacted by an installation's P⁴. (See Appendix C for a summary of the issues

associated with suicide statistics.) Instead, many suicide prevention P⁴ target changes in knowledge, skills, and risk or protective factors and set desired outcomes related to the objectives (see Tip 6-2 in Step 6 for additional possible outcome measures). For this reason, the Townville CAP had reducing suicides as the goal, but desired outcomes specific to the planned gatekeeper training program were also chosen.



SP CAM Tip 2-1. Should your desired outcome be reduced suicides?

Consider these questions before selecting a reduction in suicides as a desired outcome:

- Are the base rates of deaths by suicide high enough to detect a meaningful change? (Rates of suicide on installations will almost always be too low to detect changes that are due to the effects of a suicide prevention P⁴.)
- Does your evaluation track suicide rates over several years?
- Are deaths by suicide all classified in the same way across the geographic area being tracked (e.g., across installations, MAJCOMs, services, or components)?

If you answered “no” to any of these, a reduction in suicides is likely not the best outcome to measure for the P⁴ you selected. Consider using one of the following alternative outcome areas instead:

- Increased awareness of suicide signs and symptoms and self-care skills
- Improved identification of those at risk
- Increased access to care
- Improved provision of quality mental health care
- Reduced access to lethal means
- Reduced suicidal behaviors (ideation, attempts)
- Reduced risk factors

Adapted from Acosta et al., 2013.



SMART Desired Outcomes Tool

Completed by: CSC with CAT input Date: August

	Goal:	SMART Desired Outcome Statement
	Airmen spouses and partners know what warning signs to look for that might indicate their spouse is thinking about suicide.	Airmen spouses and partners who participate in the P ⁴ will increase their knowledge of suicide warning signs by 50%, with outcomes assessed at baseline and after the P ⁴
	SMART Checklist	
Specific	Spouses and partners are able to identify warning signs of suicide	
Measurable	Airmen spouses and partners who attend trainings will increase their knowledge of suicide warning signs by 50%.	
Achievable	Suicide prevention gatekeeper P ⁴ have been shown to increase participants' ability to identify suicide warning signs (Walsh et al., 2013)	
Realistic	It is realistic that a knowledge and skill-building suicide prevention gatekeeper P ⁴ will increase participants' ability to identify suicide warning signs	
Time-based	Results should be achieved immediately following the end of the P ⁴	
	Goal:	SMART Desired Outcome Statement
	Airmen spouses and partners are confident in their ability to intervene with a spouse at risk for suicide	Airmen spouses and partners who participate in the P ⁴ will increase their confidence in their ability to ask if a spouse or partner was considering suicide by 15%, with outcomes assessed at baseline and after the P ⁴
	SMART Checklist	
Specific	Spouses and partners feel confident in their ability to intervene with a spouse	
Measurable	Airman spouses and partners will increase their confidence to intervene by 15%	
Achievable	Previous studies have shown that gatekeeper programs like this have increased confidence in ability to check in with someone at risk for suicide by 16% (Walsh et al., 2013)	
Realistic	It is realistic that a knowledge and skill-building P ⁴ will increase confidence to intervene.	
Time-based	Results should be achieved immediately following the end of the P ⁴	



Community Action Plan Overview Tool

Completed by: CSC with CAT input Date: August

What challenges is your Community Action Plan addressing? (Summarize GTO Step 1)	What are the goals for your Community Action Plan? (From GTO Step 2)	What are your Desired Outcomes? (From GTO Step 2)	What P ⁴ are you using to achieve these desired outcomes? (Finalized by GTO Step 6)	How will you assess the quality of your P ⁴ ? <i>PROCESS EVAL</i> (from GTO Step 6)	How will you assess the outcomes of your P ⁴ ? <i>OUTCOME EVAL</i> (from GTO Step 6)	How will you track whether your goals have been addressed? (see GTO Step 6)
Townville AFB has a higher-than-average suicide rate, but few Airmen are accessing services, and most indicated that they would be more likely to turn to family for advice and support	Connect Airmen spouses with resources and information on suicide prevention so that when their spouse needs help they will know how and where to refer them.	Airmen spouses and partners who participate in the P ⁴ will increase their knowledge of suicide warning signs by 50%, with outcomes assessed at baseline and after the P ⁴	ACE gatekeeper 1.5- to 3-hour training	ACE evaluation survey, interviews with observer, interviews with staff and volunteers, participant satisfaction questionnaires, sign-in sheets for attendance data	Evaluation questionnaires assessing knowledge about suicide and suicide warning signs	One volunteer will attend an evaluation training session and use ACE evaluation questionnaires to summarize immediate program outcomes. The CSC will also monitor the data sources in the Data Catalog Tool to note any changes in data trends over time.
Same as above	Same as above	Airmen spouses and partners who participate in the P ⁴ will increase their confidence in their ability to ask if a spouse or partner was considering suicide by 15%, with outcomes assessed at baseline and after the P ⁴	Same as above	Same as above	Evaluation questionnaires assessing confidence to intervene	Same as above

The CAT fills in each column as it works through GTO steps 1–6. Following step 2, the Townville CAT filled in the first and second columns; they continued to update the tool as they completed each step, resulting in the completed tool shown here.



Chapter Three

GTO Step 3—Best Practices for a Suicide Prevention P⁴

The Townville CAT knew that all Airmen had completed foundational bystander training on self-directed and interpersonal violence and that its VPI would continue to provide the annual training requirement for Airmen. But because the CFT showed that Airmen would prefer to ask family rather than military agencies for help, the CAT also wanted training that would reach spouses and partners, who could be important gatekeepers for accessing mental health and other services for their partners.

In **GTO Step 3**, CAT members reviewed and synthesized the available evidence for various gatekeeper training programs and summarized what they learned in the **P⁴ Evidence Synthesis Tool**.

They reviewed various categories of research, including registries, systematic reviews, and journal articles. They considered gatekeeper programs listed on the Suicide Prevention Resource Center Best Practices Registry, as well as other sources. They also contacted the Clearinghouse for Military Family Readiness, where professionals contracted by the military assist installations in vetting potential P⁴ for use in military settings. The CAT then documented the strategies suggested by each resource that would address the priority goal of educating Airman spouses on how to recognize and respond appropriately to suicide warning signs.

The CAT looked for information about

- any scientific research or evaluation that had been done on the P⁴ it was considering
- what developers and other users had to say about the P⁴
- implementation guidance (e.g., curriculum, online access, materials) that would inform the CAT about the capacity needed to successfully implement one of the P⁴ it was considering.

The CAT knew that it was important to find a P⁴ that already had an evidence base, so it considered three established P⁴:

- A fairly time-intensive and in-depth gatekeeper training program, ASIST (Ashwood et al., 2015; Gould et al., 2013)
- Question, Persuade, Refer (QPR), which has been used in a number of civilian settings and evaluated to demonstrate its effectiveness (Ghoncheh et al., 2014; Ghoncheh et al., 2016)
- Ask, Care, Escort (ACE), which has been adapted for Army spouses.

CAT members completed **Section 2 of the P⁴ Evidence Synthesis Tool** for each of the three P⁴ being considered in the hope that comparing them side by side might help them decide which one to implement. The tool helped them narrow down their options, and they rejected ASIST because they considered a two-day training too costly and time-intensive to feasibly implement with Airman spouses. The team moved on to Step 4 with the two remaining options: QPR and ACE.



SP CAM Tip 3-1. Evidence-based suicide prevention P⁴

This tip includes tables of P⁴ that have been rated as having strong or promising evidence of effectiveness by either the Substance Abuse and Mental Health Services Administration's (SAMHSA's) National Registry of Evidence-Based Practices and Programs (NREPP) (nrepp.samhsa.gov)³ or the Clearinghouse for Military Family Readiness at Penn State (continuum.militaryfamilies.psu.edu). These registries review the published research literature on these P⁴ and make judgments on their likely effectiveness. P⁴ in these tables were included if they had been rated by at least one of these registries as either effective or promising. Some P⁴ included in these tables have not yet been reviewed by registries but are recommended by other suicide prevention authorities and have evidence of effectiveness published in journal articles.⁴

Tables 3-1 through 3-6 include gatekeeper and bystander training, crisis hotlines, marketing and social media campaigns, clinical mental health interventions, appropriate postvention response P⁴ provider training, and coping skills and self-referral training P⁴. Each table provides the P⁴ name and description, the target of the P⁴, a description of the curriculum, any known information about the cost, expected outcomes and their effect size, and reference information. *Effect size* is a term that refers to how much change the P⁴ is associated with in the people exposed to it when tested in a research study. When known, the tables will describe the effect size as large, medium, or small. Even small effect sizes can be important, but it is helpful to know how much change to expect from various P⁴.

³ The SAMHSA NREPP database was discontinued prior to the final publication of this document and is no longer maintained by SAMHSA. We have preserved the evidence ratings here for many of the P⁴ that were rated because we think this information is still valuable to anyone wanting to learn more about a P⁴'s evidence basis. We encourage readers to rely on the Clearinghouse for Military Family Readiness and other published sources to confirm evidence ratings presented here, particularly as new information becomes available.

⁴ In this chapter, we provide a brief background on the need to prevent suicide in the Air Force and on the approaches that the Air Force and other key leaders in suicide prevention have assessed. Readers should keep in mind that evidence evolves: New research may discredit or affirm prior ratings, or new, more-effective P⁴ may be developed. These tables also offer only a sample of P⁴ in each category but do not represent all of the possible effective suicide prevention P⁴ that may exist.

Table 3-1. Gatekeeper Training						
P ⁴ Name	Target	Description	Cost	Outcomes	Evidence	Sample Reference(s)
ACE (Ask, Care, Escort)	Airmen and families	ACE teaches Airmen to recognize warning signs of suicide in their fellow Airmen and identify those at most risk, promotes confidence in asking whether they are considering suicide, teaches active listening skills, and encourages Airmen to escort those at risk to get help. ACE is a program for every Air Force service member. Curriculum consists of PowerPoint presentation and handouts, video, online access, and ACE cards	Unknown	Increased individual and group responsibility for the well-being of others Increased awareness of stigma and its negative effects on help-seeking Increased knowledge and skills for identifying, intervening, and referring individuals at risk for suicide for help Increased competence and confidence in the application of these skills Increased knowledge of military and community resources for referrals	Recommended by Suicide Prevention Resource Center: www.sprc.org	Available at http://www.armyg1.army.mil/hr/suicide/training.asp Additional information: http://smapp.rand.org/multi/military/innovative-practices/catalog
Applied Suicide Intervention Skills Training (ASIST)	Anyone age 16 and older	ASIST teaches participants to recognize and respond appropriately to warning signs of suicide. A separate curriculum, ASIST T4T, trains individuals to become ASIST trainers. ASIST: Two-day training workshop ASIST T4T: Five-day training	Cost varies; contact developer	Improved suicide intervention skills Improved attitudes toward suicide Improved knowledge about suicide Improved comfort, competence, and confidence responding to individuals at risk	Numerous studies, including well-designed evaluations, show effectiveness in achieving listed outcomes.	Available at www.livingworks.net Research: Ashwood et al., 2015 Gould et al., 2013 Additional references available in appendix

Table 3-1. Gatekeeper Training, *continued*

P ⁴ Name	Target	Description	Cost	Outcomes	Evidence	Sample Reference(s)
Question, Persuade, Refer (QPR) Gatekeeper Training for Suicide Prevention	Teachers Parents Counseling staff Other QPR trainings available for clergy, students, corrections, sports coaches	QPR teaches adults to identify individuals at risk for suicide and intervene to refer individuals at risk to get help. One-hour in-person or online training courses; eight-hour instructor certification courses available. Required materials include two training booklets and a brochure.	Online training: \$9.95–\$14.95 per person, depending on number purchased. In person: Submit inquiry on website.	Increased declarative and perceived knowledge Increased self-efficacy Increased diffusion of training information Increased gatekeeper skills	Registry rating: https://www.continuum.militaryfamilies.psu.edu/program/fact_sheet_1520	Available at www.qprinstitute.com Research: Wyman et al., 2008 Tompkins, Witt, and Abraibesh, 2010
SOS (Signs of Suicide)	Middle school and high school students	SOS is designed to help students recognize suicide warning signs in themselves and others, decrease suicidal behaviors, and increase help-seeking. Lessons on raising awareness of depression and suicide, how to identify warning signs and risk factors, and a brief screening for depression	Implementation kits for 100 youth cost \$395 each, and SOS Second Act, a refresher course for juniors and seniors, costs \$200.	Decreased suicidal thoughts Decreased suicide attempts Decreased suicidal behavior, ideation, planning	Several studies, including well-designed evaluations, show effectiveness in achieving short-term outcomes.	Available at https://mentalhealthscreening.org/programs Research: Aseltine et al., 2007 Katz et al., 2013 Schilling et al., 2014 Schilling et al., 2016

Table 3-1. Gatekeeper Training, *continued*

P ⁴ Name	Target	Description	Cost	Outcomes	Evidence	Sample Reference(s)
Kognito Family of Heroes	Adults Military service members Families of service members	Community-based one-hour online interactive training simulation to raise awareness of post-deployment stress and build family skills to manage difficulties of post-deployment life. Participants learn to identify post-deployment stress, approach individuals at risk to discuss their concern, and access mental health support services. In addition, family members learn how to de-escalate arguments and negotiate family responsibilities.	Program license starts at \$500, depending on number of participants; cost includes consultation and technical assistance	Preparedness to recognize signs of post-deployment stress Preparedness to discuss concern with veteran and motivate him or her to seek help at a Department of Veterans Affairs (VA) hospital or vet center Self-efficacy in motivating veteran to seek help at a VA hospital or vet center Intention to approach veteran to discuss concerns Intention to mention the VA as a helpful resource	Recommended by Suicide Prevention Resource Center: http://www.sprc.org/resources-programs/kognito-family-heroes Previously rated as medium level of evidence by NREPP; link no longer available	Available at www.kognito.com Research: Albright et al., 2012

Table 3-2. Provider Training

P ⁴ Name	Target	Description	Cost	Outcomes	Evidence	Sample Reference(s)
CALM: Counseling on Access to Lethal Means	Mental health providers who work with families of clients at risk for suicide Designed for providers to counsel parents of at-risk youth; has been implemented with first responders	CALM is training for providers on how to counsel parents, family members, and others on the importance of restricting access to lethal means for individuals at risk of suicide. Consists of 90-minute training on relationship between suicide and access to lethal means, negotiating means restriction, and conducting a family firearms assessment. Available directly or as train-the-trainer. Continuing education credits are available from the National Board for Certified Counselors and the National Association of Social Workers.	Free online version; varying costs for in-person training available on website	Changes in beliefs and attitudes about access to lethal means and ability to intervene immediately after and 6 weeks later. 65% of providers used what they learned during counseling (Johnson et al., 2011). Large effect for perception of being able to effectively talk about means prevention (Johnson et al., 2011)	Recommended by Suicide Prevention Resource Center: www.sprc.org/resources-programs/calm-counseling-access-lethal-means-0 Recommended by Harvard School of Public Health: Means Matter www.hsph.harvard.edu/means-matter/	For more info: Elaine Frank, Director, CALM, Injury Prevention Center at Children's Hospital at Dartmouth: Elaine.frank@dartmouth.edu Research: Johnson et al., 2011 Sale et al., 2018
Dialectical Behavior Therapy (DBT)	Mental health providers who treat children and adults with borderline personality disorder and chronic suicidal tendencies, substance dependence, depression, posttraumatic stress disorder (PTSD), and/or eating disorders	Individual and group therapy sessions that use acceptance strategies and teach skills to help individuals reduce harmful behaviors, including suicide attempts, and better manage emotions and relationships. DBT training is available for mental health providers. In-person and online training available; continuing education credits available.	Tuition depends on training workshop; prices available online (\$1,500+ per person)	Extensive research base of measured outcome available on website, including suicide attempts, urges to self-injure, PTSD symptoms. Medium to large effects on frequency of suicide attempts and PTSD symptoms from pre- to post-treatment (Harned, Korslund, and Linehan, 2014)	Registry rating: https://www.continuum.militaryfamilies.psu.edu/program/fact_sheet_1435	Available at https://behavioraltech.org/resources/faqs/dialectical-behavior-therapy-dbt/ Marsha Linehan, Ph.D. Research: Harned, Korslund, and Linehan, 2014 Bohus et al., 2013 Additional references available in bibliography

Table 3-3. Coping Skills and Self-Referral Training

P ⁴ Name	Target	Description	Cost	Outcomes	Evidence	Sample Reference(s)
Wellness Recovery Action Plan (WRAP)	Adults, veterans, service members, families	A series of tools for creating individualized wellness and mental health recovery plans. Tools are adaptable to a variety of populations and needs. Webinars and books available	Workbook costs vary; bundles available	Compared with the control group, intervention participants reported significant improvements in symptoms, recovery, hopefulness, and quality of life Small average effect size on depression and depressive symptoms	Some studies indicating promising level of effectiveness for listed outcomes (many conducted by the developer)	Available at https://mentalhealthrecovery.com/ Research: Cook et al., 2009 Cook et al., 2012 Fukui et al., 2011

Table 3-4. Crisis Hotlines

P ⁴ Name	Target	Description	Cost	Outcomes	Level of Evidence	Sample Reference(s)
Military Helpline (call 888-457-4838 or text MIL1 to 839863)	Service members, veterans, family members	Substance use and suicide prevention crisis line operated 24/7/365 by trained veterans familiar with military culture. The crisis line offers support to military service members, veterans, and their families.	Free to call	Unknown	Effectiveness is unclear, but several studies indicate that callers had improved outcomes after calling a hotline	Available at www.linesforlife.org Research: Gould et al., 2013
The National Suicide Prevention Lifeline (800-273-TALK)	U.S. residents experiencing a suicidal crisis, including referral to Veterans Crisis Line for service members and veterans	Operators attempt to reduce callers' current crisis or suicidal states and provide referrals to mental health care. Callers hear a prompt instructing them to press 1 if they are a service member or veteran or are calling about a service member or veteran. They are then connected to the VA Center of Excellence at Canandaigua in New York. VA crisis counselors can access the veterans' electronic medical records to provide individualized support.	Free to call	51% of subjects referred for mental health services actually sought mental health care after their referrals.	Effectiveness is unclear, but several studies indicate that callers had improved outcomes after calling a hotline	Research: Gould et al., 2018 Gould et al., 2012

Table 3-5. Clinical Mental Health Interventions

P ⁴ Name	Target	Description	Cost	Outcomes	Evidence	Sample Reference(s)
Cognitive Therapy for Suicide Prevention (CT-SP)	Adults who have thought about or attempted suicide	Brief psychotherapy intervention to treat suicidal ideation and behaviors. Training workshops are offered to mental health providers to teach cognitive therapy techniques to prevent suicide. Half-day to multi-day workshops delivered by therapist who has attended 2- to 3-day training workshop	Costs for phone consultation services vary depending on site needs. The CT-SP manual is available for \$50.	Medium average effect size on depression and depressive symptoms Small to medium average effects on suicidal thoughts and behaviors (from rating previously available at nrepp.samhsa.gov)	Registry rating: https://www.continuuum.militaryfamilies.ps u.edu/program/fact sheet_2677	Available at aaronbeckcenter.org/training/clinical-training-in-suicide-prevention/ References: Brown et al., 2005 Ghahramanlou-Holloway et al., 2012 Wenzel, Brown, and Beck, 2009
Dialectical Behavior Therapy (DBT)	Mental health providers who treat children and adults with borderline personality disorder and chronic suicidal tendencies, substance dependence, depression, PTSD, and/or eating disorders	DBT includes individual and group therapy sessions that use acceptance strategies and teach skills to help individuals reduce harmful behaviors, including suicide attempts, and better manage emotions and relationships. DBT training is available for mental health providers. In-person and online training available; continuing education credits available	Tuition depends on training workshop; prices available online (\$1,500+ per person)	Extensive research base of measured outcomes available on website, including suicide attempts, urges to self-injure, PTSD symptoms Medium to large effects on frequency of suicide attempts and PTSD symptoms from pre- to post-treatment (Harned, Korslund, and Linehan, 2014)	Registry rating: https://www.continuuum.militaryfamilies.ps u.edu/program/fact sheet_1435	Available at https://behavioraltech.org/resources/faqs/dialectical-behavior-therapy-dbt/ Marsha Linehan, Ph.D. Research: Harned, Korslund, and Linehan, 2014 Bohus et al., 2013 Additional references available in bibliography

Table 3-5. Clinical Mental Health Interventions

P ⁴ Name	Target	Description	Cost	Outcomes	Evidence	Sample Reference(s)
Attachment-Based Family Therapy (ABFT)	Youths and young adults ages 12–24 and their families Clinical providers who serve youths and young adults ages 12–24 and their families	ABFT is treatment for depression, suicidal thoughts, suicide attempts, and/or trauma. It addresses the problems that emerge from family conflict, detachment, criticism, and trauma. ABFT training is available for administrators, counselors, couples and family therapists, mental health professionals, psychiatrists, psychologists, psychotherapists, and social workers. Courses for providers are available (they vary from 1-day to several-day trainings). The program teaches the 16-week treatment plan.	Varies; cost for provider training begins at about \$75 per person	Large effect size for suicidal thoughts and behaviors; medium effect size for depression and depressive symptoms	Three internal randomized control trials with small samples have shown positive outcomes	Available at www.abfttraining.com Research: Diamond et al., 2010 Israel and Diamond, 2013

Table 3-6. Postvention Responses

P ⁴ Name	Target	Description	Cost	Outcomes	Evidence	Sample Reference(s)
Complicated Grief Treatment (CGT)	Adults who have experienced traumatic grief or bereavement disorder Clinicians treating adults who have experienced loss	Treatment for adults who have experienced grief and loss that focuses on grief as a natural response. Training is available for providers who work with individuals who have experienced bereavement, such as those who have lost a loved one to suicide. Trainings focus on understanding and adapting to grief. Beginner, intermediate, and advanced trainings are offered in one- to two-day workshops. Manuals, case consultation, and other tools are available.	Registration fees begin at \$125 per person per training; see website for details	Suicide ideation as measured by Columbia Suicide Scale (Shear et al., 2016) Medium effect for suicidal thoughts and behaviors (Shear et al., 2016)	Results from two randomized control trials with some design limitations suggest that CGT may decrease suicidal ideation.	Available at www.complicatedgrief.columbia.edu Research: Shear et al., 2016 Shear et al., 2014
Family Bereavement Program (FBP)	Program is delivered to youth ages 8 to 18 who have lost a parent/ caregiver and to the surviving parent/ caregiver; intended to impact youth.	Community-based or clinical program to enhance parenting skills, teach healthy coping and communication skills, and build parent-child relationships after the death of a parent or caregiver 12 weekly two-hour small group sessions for youth and caregivers, focused on skill-building through role-play, home-based practice, and group activities	Required 3-day on-site training for group facilitators; train-the-trainer model available. Required manual: \$200. Training and associated costs available on the website or by contacting the developer	Beck Depression Inventory; Psychiatric Epidemiology Research Interview Demoralization Scale; Young Adult Behavior Checklist; Child Behavior Checklist; Young Adult Self-Report (see Sandler et al., 2010, for full interview set) Small to medium effects on youth internalizing behaviors, caregiver mental health symptoms, and caregiver and youth grief responses (Sandler et al., 2010)	Registry rating: https://www.continuum.militaryfamilies.psu.edu/program/factsheet_2680	Available at https://reachinstitute.asu.edu/programs/family-bereavement Irwin Sandler, Ph.D., 602-825-3023; irwin.sandler@asu.edu , Research: Sandler et al., 2010 Hagan et al., 2012 Luecken et al., 2010 Many other references are available at https://www.continuum.militaryfamilies.psu.edu/



P⁴ Evidence Synthesis Tool

Completed by: CSC with CAT input Date: August

Section 1: Summary of Best Available Evidence			
What sources did you explore to find the best available evidence?	Did you review this source? (Yes/No)	What P ⁴ did it suggest using?	What is the evidence for those P ⁴ ?
1. Online registries	Yes Suicide Prevention Resource Center (SPRC), www.sprc.org The Penn State Clearinghouse for Military Family Readiness, militaryfamilies.psu.edu	SPRC suggestions: • ACE was recommended for Army spouses and family members • QPR was designated as a Program with Evidence of Effectiveness by the SPRC PSU Clearinghouse suggestions: • QPR, which was designated as a “promising practice”	ACE was pilot-tested for feasibility and training utility and approved for the Army by the Army Task Force on Suicide Prevention. A preliminary report is available on ACE in the Army. QPR: SPRC reviewed studies on QPR for school staff, parents, and clinical providers and nonclinical staff from VA. PSU Clearinghouse reported that “a randomized controlled trial of 32 schools found that compared to wait-list control groups, participants trained in QPR Gatekeeper Training demonstrated an increased knowledge of suicide issues, increases in abilities to ask appropriate questions about suicide, and better awareness of school policies and abilities to use referral resources for suicidal students. Program effects were maintained 1 year after treatment. One pretest/posttest study with no control group was conducted in a group of clinical and non-clinical staff working for the Department of Veterans Affairs, and results demonstrated a significant increase in knowledge and self-efficacy.” The PSU Clearinghouse designated QPR as a “promising practice.”

Section 1: Summary of Best Available Evidence			
What sources did you explore to find the best available evidence?	Did you review this source? Yes/No	What P⁴ did it suggest using?	What is the evidence for those P⁴?
2. Systematic program evidence review papers or reports	Yes Forys and Prosser, 2010	Unclear—very few programs had shown positive effects in the military. ASIST had some evidence.	ASIST had limited evidence with AF: “Literature on improvements in knowledge and skill, but mixed results for behavior change. US Air Force personnel demonstrated improved risk identification and assessment but did not produce changes in intervention-related behaviors.”
3. Research journal articles	Yes Ireland and Holloway, 2013 Greden et al., 2010 Denning, Meisnere, and Warner, 2014 Ghoncheh et al., 2016 Matthieu et al., 2008	Ireland and Holloway, 2013; Greden et al., 2010; and Denning et al., 2014, recommend gatekeeper and peer training strategies, including ACE and QPR. Ghoncheh et al., 2016, and Matthieu et al., 2008, showed positive outcomes for QPR	Although ACE has not been evaluated for efficacy yet, a major review of DoD programs by the RAND Corporation (Ramchand et al., 2011), found that the program “has been reviewed by a panel of three suicide prevention experts and found to meet standards of accuracy, safety, and programmatic guidelines” (Ireland and Holloway, 2013). Actual knowledge, perceived knowledge, and perceived self-confidence of gatekeepers improved after QPR training (Ghoncheh et al., 2016; Matthieu et al., 2008)
4. Other reports not in research journals (e.g., evaluation report from program developer, practitioners, subject experts)	No	N/A	N/A

Complete the next section for each P⁴ you listed above and continue to consider.



Evidence Synthesis Tool—Continued

Section 2: Assessment of Evidence-Based Approach for a Specific P⁴

P⁴ being considered: Applied Suicide Intervention Training Skills (ASIST)

P ⁴ features and how they relate to our needs, behaviors, or desired outcomes	Does the P ⁴ have these features? (Yes/No)	What would we need to change to make the P ⁴ fit our needs?
1. Has evidence of effectiveness.	Yes	We need data demonstrating evidence of effectiveness with military or AF populations. ASIST has a well-established evidence base (stronger evidence from evaluations than ACE).
2. Focuses clearly on at least one of our identified goals and desired outcomes.	Yes	None needed.
3. Addresses the risk or protective or resilience factors related to resilience promotion and violence prevention (see Introduction).	Yes	None needed.
4. Provides necessary activities and materials.	Yes	Modifications to terminology to fit with AF culture and AF spouses.
5. Employs teaching methods to actively involve participants.	Yes	None needed.
6. Employs activities, instructional methods, and behavioral messages appropriate to our target population.	Yes	Would need to adapt to make these relevant to military culture and AF spouses. Trainings are fairly time intensive; may be a barrier for some spouses.



Evidence Synthesis Tool—Continued

Section 2: Assessment of Evidence-Based Approach for a Specific P⁴

P⁴ being considered: Question, Persuade, Refer (QPR)

P ⁴ features and how they relate to our needs, behaviors, or desired outcomes	Does the P ⁴ have these features? (Yes/No)	What would we need to change to make the P ⁴ fit our needs?
1. Has evidence of effectiveness.	Yes	We need data demonstrating evidence of effectiveness with military or AF populations.
2. Focuses clearly on at least one of our identified goals and desired outcomes.	Yes	None needed.
3. Addresses the risk or protective or resilience factors related to resilience promotion and violence prevention (see Introduction).	Yes	None needed.
4. Provides necessary activities and materials.	Yes	Modifications to terminology to fit with AF culture and AF spouses.
5. Employs teaching methods to actively involve participants.	Yes	None needed.
6. Employs activities, instructional methods, and behavioral messages appropriate to our target population.	Yes	Would need to adapt to make these relevant to military culture and AF spouses.



P⁴ Evidence Synthesis Tool

Section 2: Assessment of Evidence-Based Approach for a Specific P⁴

P⁴ being considered: Ask, Care, Escort (ACE)

P ⁴ features and how they relate to our needs, behaviors, or desired outcomes	Does the P ⁴ have these features? (Yes/No)	What would we need to change to make the P ⁴ fit our needs?
1. Has evidence of effectiveness.	Yes, from use in the Army	No changes needed.
2. Focuses clearly on at least one of our identified goals and desired outcomes.	Yes	No changes needed.
3. Addresses the risk or protective or resilience factors related to violence prevention and resilience promotion (see Introduction).	Yes	No changes needed.
4. Provides necessary activities and materials.	Yes	Modifications to terminology to fit with AF culture and AF spouses
5. Employs teaching methods to actively involve participants.	Yes	No changes needed.
6. Employs activities, instructional methods, and behavioral messages appropriate to our target population.	Yes	Modifications to terminology to fit with AF culture and AF spouses



Chapter Four

GTO Step 4—Assessing Fit for a Suicide Prevention P⁴

In **GTO Step 4**, the Townville AFB CAT assessed the fit of ACE and QPR for its community, installation, and target population of spouses and partners of Airmen using the **P⁴ Fit Assessment Tool**. Some components of ACE were already in use among Townville Airmen (for example, informational cards about how to Ask, Care, and Escort your Wingman), which made it a good fit for Townville AFB. Air Force personnel were familiar with the acronym but had not yet implemented ACE training on their base or with their families. In addition, ACE training had been used with Army spouses, and the CAT learned that it could make some “green-light” adaptations (i.e., minor changes to adapt for Air Force terminology that would not impact effectiveness) to make the training appropriate for Air Force spouses and partners.

Next, the team completed the **Culturally Appropriate P⁴ Checklist Tool** for ACE and considered its relevance to the Air Force. At their monthly meeting, CAT members agreed that ACE was appropriate for their target population’s needs. They also considered whether it was appropriate for Townville AFB’s cultural norms and environment. Having reviewed Tip 4-1, Types of Adaptations, in the GTO guide, team members listed some minor green-light adaptations that would improve ACE’s fit for their target population, community, and installation.

The team then used the **P⁴ Fit Assessment Tool** and the **Culturally Appropriate P⁴ Checklist Tool** to evaluate QPR, the other gatekeeper training program identified in Step 3. QPR had been used only in civilian populations. According to Tip 4-1 in the GTO guide, implementing QPR for a military population would be a “yellow-light” adaptation. Although the team liked the QPR materials and evaluation results, the fit assessment indicated that QPR would need to be adapted not only to the target population but also to the community and Air Force culture. In addition, CAT members realized that QPR would require them to select a QPR trainer, who might not have any military or AF cultural competence, from a database of trainers.

After completing the fit assessments, the CAT members decided that the military-centric ACE P⁴ was a better fit for their target population, community, and culture. In particular, they knew that ACE had already been used by the military, so fewer adaptations would likely be needed to make it appropriate for the Air Force. Because CAT members felt that their team already had many competing demands and little time or resources to devote to adapting the QPR curriculum, the number of adaptations was a particularly important consideration. Although QPR was a strong candidate, the CAT members knew that they would have a better chance of implementing and gaining leadership buy-in for a P⁴ that had already been used in a military context. They decided to proceed with ACE and moved on to Step 5 to conduct the capacity and readiness assessment.



P⁴ Fit Assessment Tool

Completed by: CSC with CAT input Date: September P⁴ Being Considered: ACE

Fit with the target population's . . .	Considerations	Fits? (Yes/No)	What adaptations can be made to increase the fit?
1. Needs	Program must improve spouses' knowledge of warning signs, comfort talking about suicide with a loved one, and knowledge of available helping resources	Yes	This program has already been used with military spouses and families (Army). Some work will be needed to customize the training on resources that are available to Airmen and families.
2. Gender, age, race/ethnicity distribution	Program must be accessible to - English and Spanish speakers - Adults and young adults - Spouses of both genders	Yes	ACE will need to be translated into Spanish
3. Other aspects of the target population (e.g., education level, work schedules)	Program must be accessible to: - Working spouses - Spouses not able to attend in-person - Spouses who are new to military life/AF culture - Spouses who themselves are Airmen - Spouses of both genders - Married spouses and unmarried partners - Spouses with child care responsibilities	Some work needed	- Offer trainings on evenings and weekends to fit with working spouses' schedules; consider offering online options for those unable to attend in person. ACE training is less time consuming than other options (ASIST), which may be more convenient for spouses who work, have children, and/or have other time commitments. - Use clear and consistent terminology and define all acronyms. Do not assume that spouses are familiar with the resources available. - Be clear in recruitment that, though ACE is referred to as training for Airmen spouses, married, and unmarried partners of both genders are welcome. - Offer child care options if available/needed.
Fit with the community's . . .			
4. Cultural norms and values	Spouses and/or participants may be of different levels/ranks	Some work needed	- Modifications to terminology to fit with AF culture and increase relevance for military spouses. - Avoid hierarchies within training session; set common and shared goals.
5. Environment in which the installation is located	Not all spouses may be local	Some work needed	Offer online webinar options in which spouses who are not local can view the recorded training sessions.

P⁴ Fit Assessment Tool—Continued

Fit with the community's . . .	Considerations	Fits? (Yes/No)	What adaptations can be made to increase the fit?
6. Other aspects of the community	Airmen may cycle on and off base	Some work needed	Implement protocols for when and how often training is provided—for example, when an Airman is assigned to Townville AFB or when a new spouse joins the community—or make training available every six months.
Fit with your installation's . . .			
7. Mission, core values, Wingman culture	Fits with values of suicide prevention, wellness, resilience. Fits with Comprehensive Airman Fitness (AFI 90-506) goals, and suicide prevention requirements in DoDI 6490.16 and AFI 90-505	Yes	None needed
8. Resilience and violence prevention priorities	Fits with values of preventing self-directed violence	Yes	None needed
9. Leadership support	Leadership supports suicide prevention efforts generally and supports installation-selected community plans for suicide prevention. Fits with AFI 1-2 Commander's Responsibilities to lead people and oversee the welfare, morale and quality of life of subordinates; fits with Airman readiness mission.	Yes	None needed
10. Context/setting (e.g. Wingman Day)/other programs in place	Will need to be integrated into already existing events and replace those that are not as effective (i.e., have QPR training rather than awareness events).	Some work needed	Integrate ACE into existing messaging; promote ACE through Wingman Day

P⁴ Fit Assessment Tool—Continued

Fit with your installation's . . .	Considerations	Fits? (Yes/No)	What adaptations can be made to increase the fit?
11. Other aspects of the installation (e.g. space to convene)	Also require: • Conference room or community room to provide trainings • Printed curriculum • Webinar or online training capacity	Yes	None needed; these resources are frequently used/readily available for trainings



P⁴ Fit Assessment Tool

Completed by: CSC with CAT input Date: September P⁴ Being Considered: QPR

Fit with the target population's . . .	Considerations	Fits? (Yes/No)	What adaptations can be made to increase the fit?
1. Needs	Program must improve spouses' knowledge of warning signs, comfort talking about suicide with a loved one, and knowledge of available helping resources	Yes	Must be adapted to fit AF culture and to be relevant to military spouses.
2. Gender, age, race/ethnicity distribution	Program must be accessible to: - English and Spanish speakers - Adults and young adults - Spouses of both genders	Yes	None needed
3. Other aspects of the target population (e.g., education level, work schedules)	Program must be accessible to: - Working spouses - Spouses not able to attend in person - Spouses who are new to military life/AF culture - Spouses who themselves are Airmen - Spouses of both genders - Married spouses and unmarried partners - Spouses with child care responsibilities	Some work needed	- Offer trainings on evenings and weekends to fit with working spouses' schedules; offer online options for those unable to attend in-person. QPR training is less time consuming than other options (ASIST), which may be more convenient for spouses who work, have children, and/or have other time commitments - QPR requires the use of QPR trainers who might not be available on needed dates and might not have flexible schedules - Use clear and consistent terminology and define all acronyms. Do not assume that spouses are familiar with the resources available. - Be clear in recruitment that, though QPR is referred to as training for Airmen spouses, married and unmarried partners of both genders are welcome. - Offer child care options if available/needed.

P⁴ Fit Assessment Tool—Continued

Fit with the community's . . .	Considerations	Fits? (Yes/No)	What adaptations can be made to increase the fit?
4. Cultural norms and values	Spouses and/or participants may be of different levels/ranks	Some work needed	- Review materials and revise terminology to make them compatible with AF culture - Avoid hierarchies within training session; set common and shared goals.
5. Environment in which the installation is located	Not all spouses may be local	Some work needed	Offer online webinar options in which spouses who are not local can view the recorded training sessions. Online versions of QPR are available for an additional cost per person.
6. Other aspects of the community	Airmen may cycle on and off base	Some work needed	Implement protocols for when and how often training is provided—for example, when an Airman is assigned to Townville AFB or when a new spouse joins the community—or make training available every six months.
Fit with your installation's . . .			
7. Mission, core values, Wingman culture	Fits with values of suicide prevention, wellness, resilience. Fits with Comprehensive Airman Fitness (AFI 90-506) goals, and suicide prevention requirements in DoDI 6490.16 and AFI 90-505	Yes	None needed
8. Resilience and violence prevention priorities	Fits with values of preventing self-directed violence	Yes	None needed

P⁴ Fit Assessment Tool—Continued

Fit with your installation's . . .	Considerations	Fits? (Yes/No)	What adaptations can be made to increase the fit?
9. Leadership support	Leadership supports suicide prevention efforts generally and supports installation selected community plans for suicide prevention. Fits with AFI 1-2 Commander's Responsibilities to lead people and oversee the welfare, morale and quality of life of subordinates; fits with Airman readiness mission.	Yes	None needed
10. Context/setting (e.g. Wingman Day)/other programs in place	Will need to be integrated into already existing events and replace those that are not as effective (i.e., have QPR training rather than awareness events).	Some work needed	Integrate QPR into existing messaging; promote QPR through Wingman Day
11. Other aspects of the installation (e.g. space to convene)	Also require: • Conference room or community room to provide trainings • Printed curriculum • Webinar or online training	Yes	None needed; these resources are frequently used/readily available for trainings



Culturally Appropriate P⁴ Checklist Tool

Completed by: CSC with CAT input

Date: September

P⁴ being considered: ACE

	Yes/No	What, if any, adaptations are needed?
Air Force relevance Have you verified the relevance of the materials you plan to use (i.e., applicable, understandable, specific)?	Some work needed	• Modifications to terminology to fit with AF culture and increase relevance for military spouses. • Modify resource cards to direct Airmen and spouses to mental health clinic, MFLC, Chaplains, ADAPT and FAP, and other resources on base or in the community.
Informed review Have the materials been reviewed by members of the community or knowledgeable others (e.g., CAB/Community Action Team members)?	Yes	The CAT and CAB reviewed materials for appropriateness and feasibility.
Cultural sensitivity throughout Is the P ⁴ culturally sensitive throughout and not just in certain sections?	Yes	None needed.
Social infrastructure considerations Does the P ⁴ take into account language, environment, values, and socioeconomic status of the Airman community in its materials and services? What about civilians and families?	Yes	• Training avoids hierarchies based on rank or level. • Training avoids assumptions about participants' knowledge of AF resources or culture. • Training will need to be made available in English and Spanish.
Cultural competence training Have the intended P ⁴ facilitators received specialized training in cultural competence?	Yes	Trainers will be Airmen or family members of service members and familiar with AF culture; Airmen facilitators receive cultural competence training at Townville AFB.



Culturally Appropriate P⁴ Checklist Tool

Completed by: CSC with CAT input

Date: September

P⁴ being considered: QPR

	Yes/No	What, if any, adaptations are needed?
Air Force relevance Have you verified the relevance of the materials you plan to use (i.e., applicable, understandable, specific)?	No	Currently not very relevant to AF spouses; materials do not take into account features that are unique to Airmen (e.g., referral processes).
Informed review Have the materials been reviewed by members of the community or knowledgeable others (e.g., CAB/Community Action Team members)?	Yes	CAT members showed a preference for ACE over QPR because ACE is appropriate for military contexts and allows volunteer trainers to conduct trainings (rather than relying on trainers in the QPR database of trainers, whose costs and availability are varied)
Cultural sensitivity throughout Is the P ⁴ culturally sensitive throughout and not just in certain sections?	No	Not sensitive to AF culture; needs to be adapted for relevance
Social infrastructure considerations Does the P ⁴ take into account language, environment, values, and socioeconomic status of the Airman community in its materials and services? What about civilians and families?	Yes	Other than revisions needed to make relevant to AF culture, QPR is appropriate to language, values, socioeconomic status, etc., of Airman spouses.
Cultural competence training Have the intended P ⁴ facilitators received specialized training in cultural competence?	Unknown	QPR facilitators are chosen from a database of available trainers, and it is unknown whether they have had any cultural competence training; they might not be familiar with military or AF culture.

Chapter Five

GTO Step 5—Readiness to Implement a Suicide Prevention P⁴

In **GTO Step 5**, the Townville AFB team assessed its innovation-specific capacity to implement ACE using the **Readiness to Implement P⁴ Tool**. First, it carefully reviewed Step 5 in the GTO guide for more description about innovation-specific capacity, which refers to the capacity to implement a specific P⁴ (in this case, ACE). CAT members then worked through each of the subcomponents together.

Because ACE would be a new program for Townville AFB, the CAT started with the “Relative Advantage” subcomponent in the tool. The team considered whether ACE was better than anything that the base was already implementing and determined that it was probably an improvement over current efforts, which were not working. The team also believed that ACE had a unique advantage in that it could target spouses. Answering the questions in the tool, the team determined that, “yes,” ACE had a relative advantage over existing P⁴, and marked that, “yes,” the readiness in this area was “OK.” They felt that, overall, the relative advantage of ACE overall was “somewhat” important for its successful implementation. If the CAT had determined that the proposed P⁴ was *not* an improvement, then the team would have needed to devise a plan to increase readiness for this subcomponent, but that was not the case.

The CAT worked through each subcomponent, remembering that a plan to increase readiness was needed only for subcomponents where the readiness was not “OK.” In some cases, the team made notes of ways to increase readiness in a subcomponent, even when the current level of readiness was considered “OK.”

If the team had still been deliberating between QPR and ACE, it would have completed a **Readiness to Implement P⁴ Tool** for QPR as well. In addition to helping teams identify and consider ways to improve readiness to implement a P⁴, the **Readiness to Implement P⁴ Tool** can serve as another way to compare P⁴ and filter out those that the team would be less ready to implement.



Readiness to Implement P⁴ Tool

Completed by: CSC with CAT input

Date: September

P⁴ being considered: ACE

Subcomponent of Readiness	Questions	Responses	OK?	Importance	Plan to Increase Readiness
Relative Advantage (can skip if considering a P ⁴ you have already been implementing)	Is this P ⁴ better than our current P ⁴ , or does our current P ⁴ remain the most advantageous?	Likely better—our previous P ⁴ did not appear to be effective; Airmen were not accessing help and were not aware of resources. Unlike others, this P ⁴ targets spouses, who we think could be an important gatekeeper in helping Airmen access support and resources.	☒ Yes ☐ No	☐ Not at all ☒ Somewhat ☐ Very	Who will work on this plan? By when will it be accomplished? None needed.
Simplicity	How simple is this P ⁴ to implement?	Will require coordination to organize training events and recruit spouses	☒ Yes ☐ No	☐ Not at all ☒ Somewhat ☐ Very	Who will work on this plan? By when will it be accomplished? None needed.

Readiness to Implement P⁴ Tool—Continued					
Subcomponent of Readiness	Questions	Responses	OK?	Importance	Plan to Increase Readiness
Ability to Pilot (can skip if considering a P ⁴ you have already been implementing)	How able are we to try out this P ⁴ ?	We can pilot-test the training with spouses who volunteered to do it at the last spouse town hall	☐ Yes ☒ No	☐ Not at all ☒ Somewhat ☐ Very	Who will work on this plan? CSC with CAT input By when will it be accomplished? Plan to pilot will be developed by January CAT meeting We will find a trainer to conduct the pilot training and a volunteer to assist in the planning and setup.
Observability	How easily can we see the results of this P ⁴ soon?	We can measure pre-/post-training effects to determine whether spouses are more knowledgeable and willing to intervene	☒ Yes ☐ No	☐ Not at all ☐ Somewhat ☒ Very	Who will work on this plan? By when will it be accomplished? Can use established gatekeeper evaluation measures to assess changes from pre- to post-. We will measure effects immediately before and following the training.
Priority	How important is this P ⁴ compared to other things we do?	Very important—we need effective interventions to reduce suicides and engage spouses and arm them with resources because Airmen indicated that they would likely turn to their spouse for help in a crisis.	☒ Yes ☐ No	☐ Not at all ☐ Somewhat ☒ Very	Who will work on this plan? By when will it be accomplished? None needed.

Readiness to Implement P⁴ Tool—Continued

Subcomponent of Readiness	Questions	Responses	OK?	Importance	Plan to Increase Readiness
Champion	Is there a well-connected person who supports this P ⁴ ?	Leadership is concerned that no one person seems to be responsible for the intervention.	☐ Yes ☒ No	☐ Not at all ☐ Somewhat ☒ Very	Who will work on this plan? CSC By when will it be accomplished? 11/15/18 1, Identify well-regarded champion with influence across multiple levels of leadership who has a strong interest in reducing suicide to promote positive messaging around the P ⁴ . 2, Work with champion to create plan to rally both enlisted and officer personnel to prioritize the P ⁴ .
Supportive Climate	Do we have the necessary policies and procedures to enable the P ⁴ ?	Yes	☒ Yes ☐ No	☐ Not at all ☐ Somewhat ☒ Very	Who will work on this plan? By when will it be accomplished? None needed.
	How committed is our CAB leadership to the P ⁴ ?	The CAB is very supportive of including spouses in prevention programming	☒ Yes ☐ No	☐ Not at all ☒ Somewhat ☐ Very	Who will work on this plan? By when will it be accomplished? None needed.
Inter-organizational Relationships	What relationships are needed between us and other organizations (e.g. Healing Abuse Working for Change) to do this P ⁴ ?	Connect with mental health clinics and MFLC on and off base to promote the P ⁴ .	☐ Yes ☒ No	☒ Not at all ☐ Somewhat ☐ Very	Who will work on this plan? CAT members By when will it be accomplished? 10/15/18 Outreach in the form of flyers, email blasts, and phone calls to mental health clinics, MFLC, and FAP on and off base.
Intra-organizational Relationships	What relationships are needed within our Community Action Team to do this P ⁴ ?	Connections with SPPM	☒ Yes ☐ No	☐ Not at all ☐ Somewhat ☒ Very	Who will work on this plan? By when will it be accomplished? None needed.

Readiness to Implement P⁴ Tool—Continued

Subcomponent	Questions	Comments	OK?	Importance	Plan to Increase Readiness
P⁴-specific Knowledge & Skills	Do we have the number of P ⁴ implementers recommended for the P ⁴ ?	Yes—we estimate that we will need one CSC, one volunteer, and one trainer for each training event.	☒ Yes ☐ No	☐ Not at all ☐ Somewhat ☒ Very	Who will work on this plan? By when will it be accomplished? After piloting, we will adjust the number of staff as needed (i.e., additional trainers, additional volunteers).
	Do our P⁴ implementers meet the following P⁴ qualifications [this sub-section may only be relevant for certain P⁴ that require special qualifications]:				
	Education level?	Yes	☒ Yes ☐ No	☐ Not at all ☒ Somewhat ☐ Very	Who will work on this plan? By when will it be accomplished? None needed.
	Years of experience?	Yes	☒ Yes ☐ No	☐ Not at all ☒ Somewhat ☐ Very	Who will work on this plan? By when will it be accomplished? None needed.
	Communication skills?	Yes	☒ Yes ☐ No	☐ Not at all ☐ Somewhat ☒ Very	Who will work on this plan? By when will it be accomplished? None needed.
	Necessary training or experience for working with the group targeted by this P ⁴ ?	Yes	☒ Yes ☐ No	☐ Not at all ☐ Somewhat ☒ Very	Who will work on this plan? By when will it be accomplished? None needed.
	Comfort enough with the topic to effectively deliver the P ⁴ with fidelity?	ACE trainers will be peers/spouses/partners and will need training in ACE curriculum.	☒ Yes ☐ No	☐ Not at all ☐ Somewhat ☒ Very	Who will work on this plan? By when will it be accomplished? ACE training for volunteer trainers.

Readiness to Implement P⁴ Tool—Continued

Fiscal and Resource Capacities	Considerations	Costs	OK?	Plan to Increase Needed Resources
Printed materials (including curriculum and recruiting flyers): Do we have access to the materials needed to deliver the P ⁴ ?	Curriculum materials: \$800 for 8 training sessions attended by 50 spouses/partners at each workshop.	\$800	☒ Yes ☐ No	Who will work on this plan? By when will it be accomplished? None needed.
Transportation, if needed	\$2,000 to cover cost of ACE trainer to provide training on base for volunteer facilitators/trainers	\$2,000	☒ Yes ☐ No	Who will work on this plan? By when will it be accomplished? None needed.
P ⁴ implementers: Received sufficient training specific to the P ⁴ ?	Yes.	N/A	☒ Yes ☐ No	Who will work on this plan? By when will it be accomplished? None needed.
Number of volunteers - costs to recruit, - train	1 volunteer to provide support for each of 8 training sessions and 1 volunteer trained in evaluation. Plan on training 5 volunteers and CSC	N/A	☐ Yes ☒ No	Who will work on this plan? CSC By when will it be accomplished? 12/15/18 Will recruit volunteers from spouses who indicated interest at recent spouse town hall meeting. A volunteer Airman will be trained to conduct the evaluation.

Readiness to Implement P⁴ Tool—Continued

Fiscal and Resource Capacities	Considerations	Costs	OK?	Plan to Increase Needed Resources
Equipment: Do we have needed access to a computer or special computer programs to implement the P ⁴ ? Does the P ⁴ require a projector or other equipment?	Projector and screen for presentations and training videos	Cost included in facility.	☒ Yes ☐ No	Who will work on this plan? By when will it be accomplished? None needed.
Amount of space, if needed, e.g. rental	One community or conference room for each of four training sessions, capacity of 50 people.	\$0	☒ Yes ☐ No	None needed. Community room available at no cost.
Evaluation materials and efforts, e.g. surveys, data entry	One volunteer will attend an evaluation training seminar through the American Evaluation Association (www.eval.org). Evaluation surveys and tools will be gathered from published evaluation studies and/or modified from Army ACE evaluation tools	\$500	☐ Yes ☒ No	None needed.
Other: ACE trainer	Trainer will be spouse/partner/peer volunteers	\$0	☐ Yes ☒ No	Recruit spouse/partner facilitators from town hall meetings or through community events, email blasts, and word of mouth.
Total cost	See items noted above.	\$5,300	☐ Yes ☒ No	See items noted above.



Chapter Six

GTO Step 6—Planning to Implement and Evaluate a Suicide Prevention P⁴

The Townville AFB CAT is now ready to develop the operations of its selected P⁴. In **GTO Step 6**, the team relies on the **P⁴ Work Plan Tool** to create a detailed plan for implementing and evaluating ACE.

- First, CAT members added ACE to its **Community Action Plan Overview Tool** to show that the P⁴ would address the desired outcomes and overall CAP goal.
- Next, they reviewed the main categories of tasks in the **P⁴ Work Plan Tool**: administrative, policies and procedures, preparation, recruitment (and retention), and implementation tasks.
- They added rows on the P⁴ Work Plan Tool for additional tasks beyond those listed and deleted some rows that would not apply to ACE implementation.
- With a detailed set of activities listed, they then filled in details such as the number of participants expected and the number of staff needed for ACE implementation.
- They assigned an individual to each task to build accountability into the plan.
- They included the timeline on the P⁴ Work Plan Tool and adjusted timelines to ensure that they matched up with the start of subsequent tasks.
- They agreed to monitor the timeline closely by adding actual dates when tasks were completed.
- Using the **P⁴ Budget Tool**, they planned the resources needed to implement ACE.

As the team members reviewed the work needed to implement ACE, they reviewed their previous tools and recalled that they were considering offering an online version of ACE for those who could not attend in person. The CAT decided that it would prefer to first implement ACE in person only and then consider adding a web-based training if it was later determined that the in-person trainings had achieved the intended outcomes. The CAT reasoned that creating and testing an online platform would be substantially more work, but it might have more time and resources to devote to an online adaptation once ACE was being implemented.

Finally, the CAT prepared for evaluation of ACE by examining the GTO guide's evaluation design guidance. The CAT also selected measures from the GTO guide and the Suicide Prevention CAM Tips 6-1 and 6-2, which list process and outcome measures.

The **Process Evaluation Planner Tool** helped the CAT think through the kinds of information that it should collect about ACE trainings to measure the quality of the ACE implementation and how well it reached and resonated with Airmen spouses and partners.

Next, the CSC, with input from the CAT, worked through the **P⁴ Outcome Evaluation Planner Tool**. In addition to Tip 6-2, the CSC consulted the following resources:

- Appendix C, “P⁴ Evaluation Planning and Example Measures,” in the *Getting To Outcomes® Operations Guide for U.S. Air Force Community Action Teams* (www.rand.org/t/TL311)
- RAND Suicide Prevention Program Evaluation Toolkit (Acosta et al., 2013)
- RAND Evaluation Approaches for Mental Health Prevention and Early Intervention Programs (Eberhart et al., 2017)
- Previous evaluations of gatekeeper training programs
- RAND online measures repository for psychological health in the military: <https://www.rand.org/nsrd/ndri/centers/frp/innovative-practices/measure.html>

The CSC specifically looked for outcome measures that matched the desired outcomes the CAT had established in Step 2: spouses’ knowledge of suicide warning signs and confidence to intervene.

The CSC shared the drafted work plan tool with the rest of the CAT for feedback and made some revisions based on that feedback. Finally, the CSC presented a summary of the plan at the next CAB meeting.

At the conclusion of GTO Step 6, the CAT was ready to add the completed ACE work plan tool to the CAP.



SP CAM Tip 6-1. Sample suicide prevention process measures

Sample Measure	Description	Reference(s)
Mental Health Intervention		
Acceptability of the intervention to participants	Participants of a mindfulness-based cognitive therapy intervention were asked to identify any portions of the intervention that made them feel more or less upset	Chesin et al., 2015
Treatment enrollment	The number of individuals enrolled in the Australian Treatment Outcome Study	Darke et al., 2015
Program attendance	How many outpatient sessions a participant attended within a given time period	Gamarra et al., 2015
Participant-provider interactions	Number and quality of documented accounts of collaboration between participant and provider in case notes	Gamarra et al., 2015
Time-Based Interventions		
Number of individuals affected by means safety policy	Counts of the number of individuals in the geographic areas or organization affected by the means restriction policy	Yip et al., 2010
Marketing Campaign		
Total reach of a social media post	Total number of times a Facebook post appeared in a news feed within the first 28 days after posting	Freeman et al., 2015
Social media user characteristics	Social media users were asked about their demographic characteristics	Robinson et al., 2015

Sample Measure	Description	Reference(s)
Gatekeeper Training		
Gatekeeper satisfaction with the training program	Participants of the Act on FACTS: Making Educators Partners in Youth Suicide Prevention were asked to rate their overall learning experience in the course, from poor to very good	Lamis, Underwood, and D'Amore, 2017
Likelihood to recommend	Participants in a QPR gatekeeper intervention were asked how likely they would be to recommend the program to others	Tompkins, Witt, and Abraibesh, 2010
Postvention		
Attrition rate of participants involved in postvention	The number of participants who were still enrolled at the end of the postvention program was divided by the number enrolled at the start of the program to determine the percentage of attrition	Shear et al., 2016
Provider Training		
Training dosage	Extent to which providers received the training curricula. For example, the number of training sessions providers attended or the number of hours of training	Kato et al., 2010
Provider perceptions of the training	Whether the provider would recommend that other providers take the training	Mellanby et al., 2010
Number of individuals screened for suicide risk by providers	The number of individuals screened using a suicide risk assessment measure	Kapur et al., 2016
Coping Skills and Self-Referral Training		
Perceived usefulness of the material	Participants rated the usefulness of the material covered in a stress and coping workshop	Hendricks Thomas et al., 2015
Crisis Hotlines		
Number of calls on which helpers actively engaged with callers	The number of calls on which callers agreed to follow-up calls	Gould et al., 2016



SP CAM Tip 6-2. Sample suicide prevention outcome measures

Sample Measure	Description	Reference(s)
Outcome: Increased awareness of suicide warning signs and resources		
Problem-solving skills	Extent to which an individual applies problem-solving skills and has a proactive coping style (e.g., tackles problems head on)	Thompson, Eggert, and Herting, 2000
Knowledge about suicide	Gatekeepers responded to statements assessing their knowledge, such as “risk factors and warning signs for suicide are essentially the same thing (true/false)”	Lamis, Underwood, and D’Amore, 2017
Attitudes about suicide	Nurse’s attitudes and therapeutic optimism towards those who attempt suicide were assessed using measures that included items such as “Those who attempt suicide are cowards who cannot face life challenges”	Barnfield, Cross, and McCauley, 2018
Attitudes toward mental health treatment	The National Comorbidity Survey Replication (NCS-R) assesses individuals’ attitudes toward help-seeking (comfort, embarrassment, likelihood of seeking help) and beliefs about the efficacy of help-seeking	Kessler et al., 2004 Viverito et al., 2018
Outcome: Improved identification of those at risk		
Screening for suicide risk	Use of systematic tool, such as the Columbia Suicide Severity Rating Scale, Symptom-Driven Diagnostic System for Primary Care, the Scale for Suicidal Ideation, or the Suicidal Ideation Screening Questionnaire, to screen individuals for suicide risk; screenings can take place in primary care, school, employment, and other non–mental health and mental health settings	Miller et al., 2017 Broadhead et al., 1995 Beck, Brown, and Steer, 1997
Suicide intervention skills	Gatekeepers rated their confidence and self-efficacy in identifying suicide warning signs and behaviors and intervening with individuals at risk for suicide	Lamis, Underwood, and D’Amore, 2017

Sample Measure	Description	Reference(s)
Confidence in intervening	Gatekeepers completed a modified QPR training and responded to measures assessing their confidence to intervene with adolescents at risk of suicide, such as “I can adequately provide first aid to a young person who has attempted suicide”	Ghoncheh, Kerkhof, and Koot, 2014
Perceived knowledge	Gatekeepers trained in QPR responded to items assessing their perceived knowledge gained from the training, such as “I have sufficient knowledge to engage in a conversation with a suicidal adolescent”	Ghoncheh, Gould, et al., 2016
Outcome: Increased access to care		
Barriers to care	Headquarters Marine Corps assessed barriers to seeking help for mental health concerns following the implementation of the Never Leave a Marine Behind (NLMB) suicide prevention program. Marines rated how much they agreed or disagreed with statements about possible reasons for not accessing care, such as “A Marine would lose their security clearance”	VanSickle, Werbel, Perera, et al., 2016
Mental health care shortage areas	Researchers assessed the number of psychiatrists per 100,000 in a given area using the publicly available Area Health Resource Files maintained by the Health Resources and Services Administration	Bishop et al., 2016 datawarehouse.hrsa.gov
Outcome: Improved provision of quality mental health care		
Mental illness symptoms and severity	Parents in military families completed measures at pre-deployment and at reintegration assessing their suicide risk, psychological distress, and emotion regulation following engagement in a family management and mindfulness training program	Gewirtz, DeGarmo, and Zamir, 2016

Sample Measure	Description	Reference(s)
Treatment adherence	Patients completing Cognitive Behavioral Therapy for Insomnia were assessed for their suicidal ideation and treatment adherence. Patients rated how often and consistently they followed various aspects of the treatment	Manber et al., 2011
Outcome: Reduced access to lethal means		
Beliefs and attitudes about means restriction; delivery of means safety education	Community mental health providers who completed Counseling on Access to Lethal Means (CALM) training completed measures assessing their beliefs and attitudes about means restriction before and after training and whether they had subsequently counseled parents about access to lethal means	Johnson, Frank, Ciocca, and Barber, 2011
Suicide deaths by jumping from a height	Researchers collected and cross-referenced data on the number and location of “deaths by jumping from a height” for 11 years before and 11 years after a suicide barrier was installed at the Bloor Street Viaduct in Toronto, Canada	Sinyor et al., 2017
Outcome: Reduced suicidal behaviors		
Suicidal ideations	The Columbia Suicide Severity Rating Scale assesses the severity of ideation, intensity of ideation, suicidal behaviors, and lethality of behaviors	Posner et al., 2011 cssrs.columbia.edu
Suicide attempts	Adolescent suicide attempts before and after the implementation of the Signs of Suicide (SOS) intervention were measured using an adapted version of the Centers for Disease Control and Prevention’s Youth Risk Behavior Survey. Students were asked whether they had actually attempted suicide in the last three months (yes or no).	Schilling, Aseltine, and James, 2016
Deaths by suicide (see Appendix C)	The DoDSER tracks military suicides, which are defined as a self-inflicted death with evidence of intent to die. The determination of death by suicide is made by the medical examiners’ office.	www.dspo.mil



P⁴ Work Plan Tool

Completed by: CSC with CAT input

Date: September 2018–Dec. 2019

P⁴: ACE

Tasks: Administrative	When Will It Be Done? (Time Frame)	Who Is Responsible?	Date Done
Prepare budget (see P ⁴ Budget Tool) to include in CAP	9/4/2018 to 9/21/2018	Townville AFB CAT and CSC	9/21/2018
Complete job descriptions (role of ACE facilitators, CSC, volunteers, and evaluator)	10/15/2018 to 10/26/2018	CSC	
Complete memorandum of understanding (MOU) with host site(s), partnering agencies (Airman and Family Readiness Center, child care center, primary school, or other sites)	10/15/2018 to 10/26/2018	CSC	
Identify an ACE champion (from step 5)	10/26/2018 to 11/15/2018	CSC	
Acquire program curriculum and materials, including evaluation materials	11/15/2018 to 11/30/2018	ACE champion identified in Step 5 will acquire program curriculum and materials; evaluation volunteer will acquire evaluation materials (see Tasks: Evaluation)	
Set 2019 implementation dates	11/15/2018 to 11/20/2018	CSC	
Find and schedule an ACE trainer to train our trainers	10/15/2018 to 11/15/2018	CSC	
Tasks: Policies and Procedures	When Will It Be Done? (Time Frame)	Who Is Responsible?	Date Done
Obtain any required permissions or approvals needed, e.g. to purchase a program curriculum, hire a certified trainer, buy ad space, conduct a survey, etc.	10/15/2018 to 12/01/2018	CSC	
Arrange liaison with mental health services for referrals	11/1/2018 to 12/3/2018	Director of Psychological Health	

<i>P⁴ Work Plan Tool—Continued</i>			
Tasks: P⁴ Preparation	When Will It Be Done? (Time Frame)	Who Is Responsible?	Date Done
Identify and select sites for spouse/partner ACE training	10/15/2018 to 11/15/2018	CSC	
Designate the CSC, VPI, Community Action Team Chair, or helping agencies as the program facilitator(s), or recruit volunteers to be the facilitator(s)	11/1/2018 to 11/15/2018	CSC	
ACE trainer will train facilitators on the ACE program	12/1/2018 to 12/15/2018	CSC and ACE trainer	
Pilot test/practice for facilitators after training	1/7/2019 to 1/11/2019	CSC and volunteer facilitators	
Develop CAB and installation community support through outreach	11/26/2018 to 1/15/2019 and ongoing throughout 2019	CAT	
Confirm implementation location (at the installation or at a community-based organization)	1 week ahead of each implementation date	CSC	
Prepare packets for facilitators for each session of ACE	12/15/2018 to 12/22/2018	Volunteer facilitators	
If needed, purchase participant incentives	N/A	N/A	
Purchase snacks for training	1/22/2019	CSC	
Acquire and test audio/video equipment at the delivery site	1/22/2019	Volunteer facilitators	
Organize transportation for facilitators and/or participants	1/22/2019	CSC	
Tasks: Recruitment (and Retention)	When Will It Be Done? (Time Frame)	Who Is Responsible?	Date Done
Develop and test participant recruitment (and retention) plan and materials	11/15/2018 to 12/15/2018	CSC and CAT	
Notify eligible population about upcoming ACE dates	1/7/2019 to 1/18/2019 and quarterly	CSC and CAT	
Confirm dates, time, and space and send reminders to registered participants	Week prior to each implementation date	Volunteer facilitators	
Send email thanks for attending and ask them to refer friends, etc.	Week after each implementation	Volunteer facilitators	

P⁴ Work Plan Tool—Continued

Tasks: Increasing Readiness to Implement P⁴	When Will It Be Done? (Time Frame)	Who Is Responsible?	Date Done
Refer back to the plans in your Step 5: P ⁴ Readiness Tool			
Tasks: Implementation	When Will It Be Done? (Time Frame)	Who Is Responsible?	Date Done
Detailed schedule for implementing the P ⁴ (where and when will each part of the P ⁴ be conducted—e.g., when and how will each component of a media campaign will be rolled out)	Quarterly throughout 2019 and 2020, pending year 1 evaluation. 4 dates, 2 sessions per date @ 90 minutes per session	CSC	
Space setup and takedown for program use	Each implementation date	Volunteer facilitator	
Tasks: Evaluation	When Will It Be Done? (Time Frame)	Who Is Responsible?	Date Done
Design evaluation and complete evaluation planner tools	9/1/2018 to 9/21/2018	CSC and CAT	9/21/2018
Recruit volunteer evaluator	9/1/2018 to 9/30/2018	CSC	
Record attendance and collect data	Each implementation session	ACE facilitator	
Enter and analyze data	2 weeks after quarterly implementation	Volunteer evaluator	
Review process evaluation data from relevant data collection tools and complete GTO Step 7 summary tool	1 month after each implementation	Volunteer evaluator	
Review outcome evaluation data (including pre- and post-survey data) and complete GTO Step 8 summary tool	After 2 implementations	Volunteer evaluator	
Present results and decide which changes are needed to improve the performance and outcomes, using GTO Step 9 CQI process and tools. Adjust goals and outcomes and reassess fit and capacity in light of implementation; update Work Plan Tool on lessons learned from implementation	Midcourse and end of year 1	Volunteer evaluator, CSC, and CAT	
Finalize documentation, inventory any supplies, and begin planning 2020 implementation	12/1/2019 to 12/20/2019		



P⁴ Budget Tool

Completed by: CSC with CAT input Date: October P⁴: ACE

Item by Category	Calculation	Cost Estimate
Personnel	% effort or hours	
CSC: 10% of work time over 12 months	No added cost	\$0
One-time ACE training for volunteer facilitators	1-day workshop	\$800
Evaluation training workshops for volunteer evaluators	\$500 for 1 to 3-day training workshop	\$500
Additional volunteers	No cost	\$0
	Personnel Subtotal	\$1,300
Materials, equipment, and supplies		
Printing costs for curriculum, ACE cards, and flyers	\$100 per training × 4 dates and 8 sessions total	\$800
	Materials, Equipment, and Supplies Subtotal	\$800
Other (e.g., travel, transportation)		
ACE trainer travel and time to train volunteer facilitators		\$2,000
	Other Subtotal	\$2,000
Total Cost	Sum of non-personnel category subtotals	\$4,600



Process Evaluation Planner Tool

Completed by: CSC with CAT input

Date: September

P⁴: ACE

Process Evaluation Areas	Considerations	Evaluation Methods and Data Collection Tools	Anticipated Schedule for Data Collection and Analysis	Person(s) Responsible
1. Characteristics of participants compared with those of the target population	Age, gender, race/ethnicity	Evaluation survey, including demographic questions	Collection: immediately before and immediately after each training Analysis: after all four trainings	Facilitator at implementation (data collection) Volunteer evaluator (analysis)
2. The participants' utilization compared with the program plan	How many participants attended each training session compared with the target (20 at each, total of 80 participants)	Sign-in sheets	Collection: at the start of each training Analysis: all four trainings	Facilitator at implementation (data collection) Volunteer evaluator (analysis)
3. Level of delivery the P ⁴ achieved (or exposure to the P ⁴), and inclusion of all planned components	Were all training components delivered? Observer feedback on quality of communication	A volunteer evaluator will observe the pilot training and record qualitative information on training content.	Collection: during pilot training Analysis: after pilot training	Volunteer evaluator

Process Evaluation Planner Tool—Continued				
4. Satisfaction of the participants	Satisfaction questions on evaluation surveys	Post-training evaluation survey includes questions about satisfaction with training and content	Collection: after each training Analysis: after all four trainings	Volunteer evaluator
5. Staff's (including volunteers') perception of the implementation	Volunteers, other staff	Interviews/debriefing with volunteers and any other staff involved in program	Collection: interview within 1 week of each training Analysis: after all four trainings	Volunteer evaluator with facilitators and other volunteers
6. Adherence of implementation to the GTO Step 6 Work Plan	Review: • Administrative tasks • Policies and procedures • Recruitment and retention • Implementation planning tasks • Evaluation planning tasks	Examine GTO step 6 Work Plan Tool to see whether the person in charge of each task accomplished it as planned.	At debrief team meeting	Volunteer evaluator with facilitators and other volunteers
7. Other	N/A			



P⁴ Outcome Evaluation Planner Tool

Completed by: CSC with CAT input Date: September P⁴: ACE

Desired Outcome	Evaluation Design	Scale Name/ Questions	Source of Scale/ Questions	Items to Include
Airmen spouses/partners who participate in the P ⁴ will increase their knowledge of suicide warning signs by 50%, with outcomes assessed at baseline and after the P ⁴	☐ Pre-/post- with comparison group ☒ Pre-/post- ☐ Post- only	14-item measure of declarative knowledge about suicide (multiple choice and true/false items); 5-item measure on perceived knowledge (rated from 1 = very low to 5 = very high)	Cross, Matthieu, Cerel, and Knox, 2007	All 14 declarative knowledge items and 5 perceived knowledge items
Airmen spouses/partners who participate in the P ⁴ will increase their confidence in their ability to ask if a spouse/partner was considering suicide by 15%, with outcomes assessed at baseline and after the P ⁴	☐ Pre-/post- with comparison group ☒ Pre-/post- ☐ Post- only	Confidence to check in with a spouse or partner about how they are feeling (from 0 = not at all to 10 = extremely)	Walsh et al., 2013	One-item measure; Modify language to be appropriate to spouses/partners



Chapter Seven

GTO Step 7—Process Evaluation for a Suicide Prevention P⁴

After its CAP was approved by the CAB, Townville AFB began implementing the ACE program. Before and after each training session, the volunteer evaluator collected the evaluation information outlined in the **Process Evaluation Planner Tool** and the **P⁴ Outcome Evaluation Planner Tool**. After the first year of implementation, the volunteer evaluator compiled the evaluation information into a report, which the CSC used to complete GTO Steps 7 through 10.

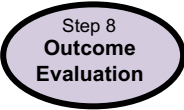
In **GTO Step 7**, the ACE volunteer evaluator and the CSC worked together to complete the **Process Evaluation Results Summary Tool**. The volunteer evaluator had collected information about how well ACE was implemented from a variety of sources, including sign-in sheets, satisfaction surveys, participant knowledge from evaluation questionnaires, and qualitative information from the ACE trainer and a volunteer who had observed a training session. From this, the volunteer evaluator and the CSC learned that, while they were able to reach some of their target population, they had not reached male spouses, and spouses of enlisted personnel were underrepresented in their trainings. In addition, they identified three implementation issues: Two trainings had not occurred; there had been a delay in printing materials for the first training sessions; and finding volunteers had taken longer than expected. They also determined that the training was being delivered as intended and that most participants planned to use what they learned, thought the training was helpful, and would recommend it to others.



Process Evaluation Results Summary Tool

Completed by: Volunteer evaluator Date: December 2019 P⁴: ACE

Process Evaluation Questions	Process Evaluation Data and Results
What were the characteristics of P ⁴ participants compared with those of the target population?	100% of attendees were from the target population (Airman spouses/partners). All attendees were female (100%), which is <i>more than</i> the proportion of female spouses/partners at Townville AFB (80%). The majority of participants were white (75%); 20% were black/African American; 4% were Asian; and 1% were American Indian/Native Alaskan. This is representative of the population of Townville AFB spouses. The average age of attendees was 32, which is <i>slightly older</i> than the average age of all Airman spouses (28). 60% of attendees were spouses of officers, and 40% were spouses of enlisted Airmen. At Townville AFB, 20% of Airmen are officers, and 75% of officers are married; 80% of Airmen are enlisted, and 50% of enlisted members are married; therefore, <i>spouses of enlisted Airmen were underrepresented in the attendee group</i>.
What was the participants' P ⁴ utilization compared with the P ⁴ plan?	6 out of the 8 planned trainings occurred; two trainings (on the same day) were not held because the trainer fell ill and no one else had been trained to lead the sessions that day. An average of 45 participants attended each of the 6 sessions, for a total of 270 participants out of the planned 400 (which was based on 50 attendees at each of 8 sessions)
What level of delivery did the P ⁴ achieve, and did all planned components get delivered?	In all 6 ACE training sessions, the trainer delivered the curriculum as planned. This was corroborated by the trainer and the volunteer who observed each session. In the first two ACE training sessions, participants did not receive the printed ACE cards because of a printing delay.
How satisfied were the participants?	94% of participants said that they planned to use what they had learned in the session. 92% thought that the training was helpful or very helpful 95% said that they would recommend the training to a friend or family member
What was the staff's (including volunteers) perception of the P ⁴ ?	The ACE trainer and the volunteer observer felt that the training went well overall and that participants seemed interested and engaged. Staff felt that they would have benefited from having at least two trainers who were trained to deliver the ACE program—either together or as a backup in case a trainer was ill or unavailable.
How closely did the P ⁴ implementation follow the GTO Step 6 Work Plan?	Most tasks were completed approximately on time. Finding a volunteer observer took 2 weeks longer than expected.
Other	



Chapter Eight

GTO Step 8—Outcome Evaluation for a Suicide Prevention P⁴

In **GTO Step 8**, the ACE volunteer evaluator provided a summary of the results from the pre- and post-program outcome evaluation questionnaires. Participants showed improvements in their knowledge about suicide and in their confidence to intervene. The CSC and the evaluator completed the **P⁴ Outcome Evaluation Results Summary Tool** in preparation for reporting the results to a variety of stakeholders, including the CAB, the full CAT, and the staff who delivered ACE. They also published some of the results in installation newsletters that go to Airmen and their spouses and partners. The CSC, the evaluator, and the CAT also planned to convene a meeting to brainstorm how to improve on their results in the second year of implementation.



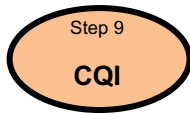
P⁴ Outcome Evaluation Results Summary Tool

Completed by: Volunteer evaluator

Date: December 2019

P⁴: ACE

Metric / Item / Scale / Other data Name	Pre-P ⁴ Score	Post-P ⁴ Score	Percentage Change [(post- minus pre-) divided by pre-]	Interpretation
14-item measure of declarative knowledge about suicide (Cross, Matthieu, Cerel, and Knox, 2007)	P ⁴ : average score 8.6 (number of items correct out of 14)	P ⁴ : average score 12.2 (number of items correct out of 14)	+41.9% increase in scores	Compared with preprogram scores, participants were able to correctly answer 41.9% more questions assessing suicide knowledge at follow-up.
	Comparison: N/A—no comparison group	Comparison: N/A—no comparison group	N/A	
5-item measure of perceived knowledge (Cross, Matthieu, Cerel, and Knox, 2007)	P ⁴ : average score 1.8 (scale from 1, very low, to 5, very high)	P ⁴ : average score 3.4 (scale from 1, very low, to 5, very high)	+88.9% increase in scores	Program participants' perceived knowledge about suicide increased by 88.9% from preprogram evaluation to follow-up.
	Comparison: N/A	Comparison: N/A	N/A	
Confidence in ability to check in with how spouse is feeling (adapted from Walsh et al., 2013)	P ⁴ : average score 7.7 (scale from 0, "not at all" to 10, "extremely")	P ⁴ : average score of 9 (scale from 0, "not at all" to 10, "extremely")	+16.9% increase in scores	Program participants increased their confidence by 16.9% from pre-program evaluation to follow-up.
	Comparison: N/A	Comparison: N/A	N/A	



Chapter Nine

GTO Step 9—Continuous Quality Improvement for a Suicide Prevention P⁴

In **GTO Step 9**, the CSC and the CAT compared their evaluation results with the needs and desired outcomes of the ACE training, and they brainstormed ways to improve implementation and outcomes using the **CQI Review Tool**. They determined that although ACE was improving participants' confidence to intervene and perception of knowledge about suicide, the program had just missed the goal of improving actual, or declarative, knowledge by 50 percent.

To meet this goal and maintain positive outcomes in the future, the team members decided to review the outcome evaluation questionnaires to determine whether there were patterns or specific knowledge areas on which future trainings should focus. They also identified a number of steps to take to improve their process evaluation results in the next round.



CQI Review Tool

Completed by: CSC

Date: December 2019

P⁴: ACE

1. Priorities for Action

Targeted Need	Desired Outcome	Outcome Evaluation Result (Check one box and explain)	Action Needed? (Yes/No & Explain)
Airmen who exhibit warning signs of suicide are not being identified	Airmen spouses who participate in the P ⁴ will increase their knowledge of suicide warning signs by 50%, with outcomes assessed at baseline and after the P ⁴	Progress on desired outcome: ☐ Exceeded ☐ Reached ☒ Missed Explain: We partially reached and partially missed this goal: ACE greatly improved perceived knowledge (improvement of 88.9%); we just missed the goal of 50% improvement in declarative knowledge at follow-up (41.9% improvement in knowledge achieved).	Yes, action needed Explain: We will review specific knowledge items on the evaluation surveys to determine whether there are patterns in missed questions and then consider emphasizing these knowledge areas more in future trainings.
Airmen say they would turn to family for help, but spouses might feel unable to help	Airmen spouses who participate in the P ⁴ will increase their confidence in their ability to intervene if a spouse was considering suicide by 15%, with outcomes assessed at baseline and after the P ⁴	Progress on desired outcome: ☒ Exceeded ☐ Reached ☐ Missed Explain: We slightly exceeded our goal of increasing confidence to intervene by 15% (16.9% improvement achieved).	No action needed Explain: We exceeded our goal by 1.9%.

2. Process Evaluation		
Dates and Participation Targets		
P ⁴ dates: Three ACE trainings		
A. Total target population: There are 2,667 Airman spouses at Townville AFB.		
Target population characteristics: • 80% of Airman spouses at Townville AFB are female. • Townville AFB spouses' race/ethnicity: white (73%); black/African American (22%); Asian (4%); American Indian/Native Alaskan (1%) • Average age of Airman spouses at Townville AFB: 32 • At Townville AFB, 75% of officers are married, and 50% of enlisted members are married.		
P⁴ Adherence/Delivery		
B. Total P ⁴ participants who attended at least one session: 6 sessions of 45 participants each = 270		
C. Total who attended every session: N/A or same as above (ACE sessions are one-time trainings; participants do not attend multiple sessions)		
What level of P ⁴ adherence did you achieve (offer activities according to P ⁴ requirements), and what evidence do you have to document this level of adherence? A volunteer observer attended the training sessions and recorded the length of time of each session, whether each curriculum item was covered, and whether the trainer provided the same information at each session. Adherence to the curriculum and training length was good, with all sessions covering all of the material in the time allotted. One of the scheduled four sessions was canceled due to trainer illness (no replacement trainers were available).		
Process Evaluation Results	Divide the Total at B by the Total at A	Divide the Total at D by the Total at B
D. Total participants in evaluation: 255 participants completed both the pre-program and post-program evaluation process and outcome questionnaires	% of target: <u>9.6%</u> (B ÷ A × 100)	% of actual: <u>94.4%</u> (D ÷ B × 100)
Evaluation participants (check all that apply): ☐ Facilitators or staff ☒ Participants (all) ☐ Participants (some) ☐ Others _____		
How well does the evaluation represent the population served? (check one): ☐ Not at all well ☐ Somewhat well ☒ Very well		

3. Planning P⁴ Improvements		
Step-by-Step Review	Response	Changes for the Next Time?
Were the problems identified the right problems to be addressing with our P⁴? (GTO Step 1) Are there other problems that should be addressed? Have the problems changed? Should we 'stay the course' with the current P ⁴ ?	Participant data at from the baseline survey definitely showed the need for ACE; given the number of spouses we still need to reach at Townville, we should definitely continue with ACE	Try to include more male spouses/partners and obtain data for them
Do we need to change goals and desired outcomes or potential participants? (GTO Step 2) Target different conditions or behaviors? Reset benchmarks up or down?	We do not need to change the goals and desired outcomes, but we do need to improve targeting of the training to reach a representative sample of spouses.	We should improve our outreach efforts to increase participation among male spouses and spouses of enlisted Airmen.
Should we consider another P⁴? (GTO Step 3) Or are there other improvements we need to make?	No, the program is successful overall. To reach our goals, we should make the changes identified on this tool, rather than considering a different P ⁴ .	Make changes identified in this tool.
Does the P⁴ still philosophically and logistically fit our installation, community, and participants? (GTO Step 4) If not, why not? What adaptations could be made? Were any adaptations made? How did that go?	Yes.	None needed.
Do we have the readiness (willingness and capacities) to do the P⁴ well? (GTO Step 5) Has there been a shift in resources? Are new staff capacities needed?	We should have an alternate/substitute trainer who can step in to conduct trainings in case the primary trainer is unavailable.	Next time, we will recruit an additional volunteer who will attend all the trainings and learn the material in case they need to serve as a substitute trainer.
How well did we plan? (GTO Step 6) Any suggestions for improvement? Anything missing?	We planned well overall. We did learn that printed materials should be sent to the print shop 5 days in advance. Finding a volunteer facilitator took longer than expected.	We will follow the plan so that materials are sent on time to the printer. We will adjust the timing of our planning to allow for more time to find volunteers.
How well did we implement the P⁴? (GTO Step 7) Did we implement the P ⁴ with adherence—i.e., were the core components delivered? What are the main conclusions from the process evaluation?	Overall, we implemented ACE well in the training sessions that were conducted.	Next time, we will have ACE cards printed earlier and will have a trained substitute trainer in case the primary trainer is unavailable, so that all sessions can be held as planned.

Step-by-Step Review	Response	Changes for the Next Time?
How effectively did the P⁴ help us reach our desired outcomes? (GTO Step 8) What are the main conclusions from the outcomes evaluation?	Those who attended the training improved their perceived knowledge and confidence to intervene. Some work needs to be done to improve declarative knowledge.	We need to increase actual knowledge of suicide warning signs and focus on content areas where evaluation surveys showed more missed questions.



Chapter Ten

GTO Step 10—Sustainability Review for a Suicide Prevention P⁴

In **GTO Step 10**, the CSC reviewed the sustainability of the ACE program using the **Sustainability Review Tool**.

The CSC first assessed the current status of the ACE program: Was there still a need for ACE? How strong were the evaluation results? What was the level of support for ACE?

Then, the CSC considered what should be done in the future to increase ACE's sustainability. The CSC identified ways to store and maintain the ACE curriculum, evaluation materials, and GTO tools so that those who needed to access them could do so. The CSC identified next steps, including holding a spouse town hall to solicit feedback on how to improve program outreach to spouses who had been underrepresented in previous trainings. The CSC also outlined a plan to sustain the number of volunteers trained to present ACE sessions and evaluate the program. Finally, the CSC reached out to CAT members again to foster champions among them for continuing implementation based on the quality of the results from their evaluations.



GTO Step 10 Sustainability Review Tool: Current Status

Completed by: CSC

Date: December 2019

P⁴: ACE

Questions (use your GTO tools as you address these questions)		Answers	Next Steps (Explain the need or enter “N/A”)
What we have done in the past	Does the need for the P⁴ continue? Has the need for the P ⁴ changed or remained the same? Are there any new concerns?	Yes, suicide prevention is an AF priority; Airmen are likely to ask for help from spouses.	Continue to hold ACE sessions and increase participation through word of mouth and other targeted outreach.
	Are our results good enough to continue doing the P⁴? Look at your results and determine the P ⁴ 's impact on the participants.	Yes, results for participants who attended the training are positive.	Hold more training sessions to reach underrepresented spouses; in future trainings, consider emphasizing knowledge areas that participants answered incorrectly on evaluation forms.
	What particular result can we use to justify the P⁴? Any goal or desired outcome that you achieved may be a good “result” to share with stakeholder to justify the P ⁴ . Look at the Goals and CQI tools to see what desired outcomes were reached or exceeded. Highlight any dramatic improvement from your data.	94% of participants said that they planned to use what they had learned. 92% thought that the training was helpful or very helpful. 95% said that they would recommend the training to others. Participants correctly answered 41.9% more questions on suicide knowledge at follow-up. Participants’ perceived knowledge increased by 88.9%. Participants increased their confidence by 16.9%.	Continue to measure these outcomes; review and consider other process and outcome measures that may show compelling information in other areas as well.
	What should we change about the way we do the P⁴? Using evaluation data and the CQI tool from GTO Step 9, think about the process—recruitment, enrollment, attendance, logistics, etc.—and consider whether one or more of these activities could be strengthened or changed to be a better fit for your site and staff.	We should change recruitment procedures.	Brainstorm ways to engage male spouses and spouses of enlisted Airmen, since we are not reaching these populations as well as we should be. We could hold a town hall to solicit feedback on how to do this and possibly change our recruitment strategies based on what we learn.

Who knows the P⁴ and supports keeping it going here? Consider which individuals at the installation are champions of this P⁴—i.e., influential people who really like the P⁴—and are enthusiastic about it, including leadership. Should somebody else be brought on? Who is going to take the lead?	The Suicide Prevention Program Manager has been a champion for the ACE program. The volunteer observer expressed interest in becoming trained as a trainer.	Keep CAT engaged through updates about positive outcomes and next steps. Train volunteer to conduct future ACE sessions.
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Sustainability Review Tool: Future Work

Completed by: CSC

Date: December 2019

P⁴: ACE

Sustainability Questions		Answers	Next Steps
What we will do in the future	Where will the GTO tools, the P⁴ evaluation, and the P⁴ manual and materials be kept? Decide who will have access to them and consider how this is the same or different from other P ⁴ materials at your installation. Where do you currently keep them?	The CSC will keep the GTO tools, evaluation materials, and a copy of the ACE manual and materials. The GTO tools and evaluation reports will also be posted on the CAT sharepoint site so that all members have access to them.	The CSC will post the materials on the sharepoint site and provide CAT members with a link to the folder.
	Who will be in charge of making the P⁴ happen? Also, think about who is trained to be the facilitator, how that decision was made, and what supervision would be necessary.	The CSC, with support from the Suicide Prevention Program Manager (who has been a champion for the ACE program). The volunteer facilitator also will be trained as a substitute trainer and will be supervised by the SPPM.	CSC and SPPM will work together to plan Year 2 ACE implementation.
	Who else is in favor of and needs to be involved in keeping the P⁴ going? Think about the Wing Commander, the Community Action Team, the CAB, and the community of Airmen. Should a new champion be added?	CAT and CAB members; Airmen; Airman spouses	CAT and CAB members should be briefed on ACE results and progress; Airmen and spouses should be briefed on the importance and positive effects of ACE to increase buy-in and support.
	Who will do the evaluation and pre-/post- surveys, track attendance, and monitor adherence? When (how often) and to whom will the results be reported? Think about who could lead these activities (1 person or more—staff or an outside group). Think about how to organize the results and who needs to see them. Also think about whether your evaluation plans should be revised.	The volunteer evaluator from the first year of implementation will continue to evaluate the program and will train their replacement, who will take over the following year. The CSC will monitor results and present to the CAT and CAB at least once every year.	The evaluator will train their replacement. Volunteer evaluation posts should be considered 2-year positions, in which in the first year they are assistant evaluators and in the second year they are primary evaluators (who then supervise the assistant). The CSC will present first-year findings to the CAT and CAB.



Sustainability Review Tool: Future Work

Completed by: CSC Date: December 2019 P⁴: ACE

	Sustainability Questions	Answers	Next Steps
	How much funding, if any, do we need for running the P⁴? Are there resources other than funds that are needed to run the P ⁴ well (e.g., for recruitment, good attendance, supplies)?	In the future, costs will be limited to printing and incidentals, because both evaluators and trainers will be volunteers.	N/A
	When will we run the P⁴ again? And when will we revise the Step 6 Work Plan? Consider the different times of year or days and times of the week and what worked best in the past. Think about lead time needed to look back at the Work Plan and revise it if needed.	In 2020. Begin revising work plan and preparing for implementation in November 2020.	CSC and SPPM will meet to review 2020 events calendar to begin planning implementation timeline.
	How can we keep staff trained in the P⁴? The more staff are trained, the more likely you will be able to continue the P ⁴ . Look back at the P ⁴ materials and what is required of facilitators. Consider who could be trained and who would be responsible for doing the training.	Training sessions will always be run by one trainer and attended by another trainer in training	Recruit more volunteer trainers and establish the process for training them.

APPENDIX A

SUICIDE RISK AND PROTECTIVE FACTORS

Numerous studies have identified the risk and protective qualities of individual- and community-level factors, as well as the role of relationships with coworkers, friends, and family. Risk factors increase the likelihood for suicide, while protective factors help “strengthen, support, and protect individuals from suicide” (U.S. Department of Health and Human Services Office of the Surgeon General and National Action Alliance for Suicide Prevention, 2012). A brief description and references are provided here, and Table A-1⁵ summarizes research on which factors, at the community, relationship, and individual levels, are associated with either greater risk or greater protection (indicated by the check marks).

Risk Factors. In the U.S. Air Force, **individual risk factors** include hazardous drinking, prescription drug misuse, depressive symptoms, and suicidal thoughts and behaviors (Lorber, Heyman, and Smith Slep, 2017). Factors that increase individual risk of suicide for military personnel include psychiatric illness, exposure to killing or atrocity during deployment, multiple deployments, chronic pain, physical disabilities, mild traumatic brain injury, substance use, sexual assault and harassment, and access to weapons (Bryan et al., 2015; Lineberry and O’Connor, 2012; Griffith, 2017). Other individual risk factors that have been identified in the general population include transitions (Van Orden et al., 2010; Brenner and Barnes, 2012); hopelessness; impulsive and/or aggressive tendencies; history of trauma or abuse; major physical illnesses; previous suicide attempts; family history of suicide; job or financial loss; relationship loss; easy access to lethal means; lack of social support and feelings of isolation; lack of health care, especially mental health and substance use treatment; and exposure to others who have died by suicide (in real life or via the internet and media) (Bryan et al., 2015; Lineberry and O’Connor, 2012). **Relationship risk factors** that have been identified for Airmen include intimate partner violence and child abuse; relationship problems; and poor personal, family, workplace, and community adjustment, all associated with greater suicidality (Lorber, Heyman, and Smith Slep, 2017; Bryan et al., 2015; Lineberry and O’Connor, 2012). Stigma, discrimination, and poor access to mental health care are examples of risk factors for suicide at the **community level** (Farrelly et al., 2015; Nock et al., 2013).

Protective Factors. **Individual protective factors** include having strong skills in problem-solving, conflict resolution, and handling problems in a nonviolent way (Nock et al., 2013). **Relationship protective factors** include strong connections to family, strong social support, and support through ongoing medical and mental health care (Nock et al., 2013). **Community-level protective factors** include restricted access to highly lethal means of suicide, community support while in theater, and cultural and religious beliefs that discourage suicide and support self-preservation (Bryan et al., 2010; Nock et al., 2013).

⁵ The purpose of this table is to describe the range of risk and protective factors that have been associated with suicide death, attempts, and ideation. This table does not account for the strength of the relationship, nor does it distinguish whether the factors are linked to suicide ideation, attempts, and/or death.

Table A-1. Factors That Promote Risk or Provide Protection

Level	Factor	Promotes Risk ⁶	Provides Protection ⁷
Examples of community factors	Local clusters of suicide	✓	
	Poor community adjustment	✓	
	Stigma associated with asking for help	✓	
	Cultural and religious beliefs, such as the belief that suicide is a noble resolution of a personal dilemma	✓	
	Cultural and religious beliefs that discourage suicide and support self-preservation		✓
	Community support while in theater		✓
	Effective health care, especially mental health and substance abuse treatment	✓ Lack of	✓ Access to
	Regional gun availability	✓	
Examples of relationship factors	Intimate partner violence and child abuse	✓	
	Poor workplace adjustment	✓	
	Family connections and adjustment	✓ Poor	✓ Strong
	Relationship problems	✓	
	Exposure to others who died by suicide (in real life or via the internet)	✓	
	Support through ongoing medical and mental health care		✓
	Social support	✓ Lack of	✓ Strong
Examples of individual factors	Hazardous drinking	✓	
	Gun ownership	✓	
	Prescription drug misuse	✓	
	Depressive symptoms	✓	
	Exposure to killing or atrocity during deployment	✓	

⁶ Lorber, Heyman, and Smith Slep, 2017; Bryan et al., 2015; Lineberry and O'Connor, 2012; Van Orden et al., 2010; Brenner and Barnes, 2012; Anestis and Houtsma, 2017.

⁷ Bryan et al., 2010; Nock et al., 2013.

Level	Factor	Promotes Risk ⁶	Provides Protection ⁷
	Multiple deployments	✓	
	Chronic pain	✓	
	Mild traumatic brain injury	✓	
	Access to lethal weapons	✓ Easy access	✓ Restricted access in times of crisis
	History of trauma or abuse	✓	
	Previous suicide attempts	✓	
	Poor personal adjustment	✓	
	Family history of suicide	✓	
	Problem solving and conflict resolution skills		✓
	Frequent transitions	✓	
	Sexual harassment and assault	✓	

APPENDIX B

TYPES OF SUICIDE PREVENTION P⁴

In Tip 3-1, Evidence-based suicide prevention P⁴, we identified a selection of evidence-based P⁴ that are categorized into different types of suicide prevention strategies. Below, we provide more background information about each of these approaches.

Clinical mental health interventions include a wide range of treatments designed to improve mental health and prevent suicide. These can include talk therapy and psychopharmaceutical interventions. Brief cognitive behavioral therapy and crisis response planning interventions have shown significant reductions in suicidal behavior in military populations (Bryan and Rozek, 2018; Rudd et al., 2015; Bryan et al., 2017). Crisis response planning strategies have individuals identify and write down personal warning signs, coping strategies, and sources of social and professional support. These plans identify what to do in case of a crisis; they are *not* safety contracts, which, in contrast, identify what *not* to do (safety contracts have been shown to have no effect on preventing suicide). Examples of crisis response strategies included in Table 3-3 are Wellness Recovery Action Planning (WRAP) and the Safety Planning Treatment Manual available from the VA.

Coping skills and self-referral training teach individuals to self-identify signs of distress and seek needed support through self-referral. The skills and knowledge built through these trainings are similar to those of gatekeeper or bystander programs, but the training is focused on encouraging individuals to engage in self-care rather than support the care of others. The Air Force has annual requirements for Airmen to complete such training. Evaluations of programs like this have found decreased suicidal ideation, depression, hopelessness, stress, and anger and increased self-esteem and social network support (Eggert et al., 1995; King, Strunk, and Sorter, 2011).

Crisis hotlines are phone numbers that Airmen and their family members or friends can call or text to receive immediate help in the event of a mental health crisis or suicidal ideation. Little research has been done on the effectiveness of crisis lines, but a number of studies have found that callers had decreased suicidal ideation from the beginning to the end of the call and decreased depressed mood (Gould, Kalafat, et al., 2007; Gould, Munfakh, et al., 2012; Meehan and Broom, 2007; Ramchand, Jaycox, and Ebener, 2017). Hotlines are typically staffed by individuals trained to de-escalate suicidal ideation and intent and connect callers to appropriate services. One resource is the Veterans/Military Crisis Line (call [1-800-273-TALK \[8255\]](tel:1-800-273-TALK)). The crisis line is available 24 hours a day, seven days a week. Another example is the Military Helpline (call [888-457-4838](tel:888-457-4838); text MIL1 to 839836). Lines for Life, the organization operating the Military Helpline, reported that more than 30,000 of the 73,000 calls it received in 2016 were to its dedicated military crisis line (www.linesforlife.org). The Department of Defense Suicide Outreach Center provides psychological health information and connects service members and families with resources (call [1-866-966-1020](tel:1-866-966-1020)). Military OneSource is a free service provided by DoD to service members and their families to help with a broad range of concerns, including money management, spouse employment and education, parenting and child care, relocation, deployment, reunion, and the particular concerns of families with special needs members. It is not solely a crisis line; it can also help with more-complex issues, such as relationships, stress, and grief. Services are available 24 hours a day, by telephone and online (call [1-800-342-9647](tel:1-800-342-9647); www.militaryonesource.mil).

Gatekeeper and bystander training programs teach individuals to recognize and respond appropriately to suicide warning signs. Programs are typically aimed at peers, family members, or other gatekeepers (i.e., clergy, clinic staff, command units); educate individuals on common suicide risk factors and warning signs; and teach individuals appropriate ways to discuss suicide and refer those at risk to appropriate resources. An example of a program aimed at promoting peer skills is the Ask, Care, Escort (ACE) program implemented in the Army and the Air Force, which teaches peers to ask whether their buddy is considering suicide, show appropriate concern, and escort them to find help. Programs that focus on building skills and changing behaviors are more effective than awareness or educational programs (Guo and Harstall, 2004). Gatekeeper programs often target trusted individuals or those in positions of authority to whom Airmen might go for help. The vast majority of U.S. Air Force chaplains (more than 80 percent) report seeing individuals with suicidal thoughts or intentions at least sometimes (Kopacz et al., 2016). Providing training to chaplains on available suicide prevention resources is an example of a gatekeeper training program. Overall, research on these types of programs has found improved knowledge about suicide and attitudes (self-efficacy) about intervening with individuals at risk for suicide (Cross, Matthieu, et al., 2007; Clark et al., 2010).

Marketing and social media campaigns are strategies that promote awareness of suicide warning signs, available resources, and/or appropriate responses to warning signs. The Air Force participates in Suicide Awareness Month and Depression Awareness Month campaigns and has promoted ACE in social media. Marketing campaigns are usually aimed at whole groups or communities. Research has shown that awareness campaigns are less effective than strategies that teach skills or address specific behaviors (Guo and Harstall, 2004). However, awareness campaigns have been found to increase knowledge about suicide and help-seeking intentions (Torok et al., 2017).

Postvention responses are strategies implemented in the aftermath of a suicide to prevent follow-on suicides. Appropriate postvention strategies include providing support to bereaved individuals and encouraging appropriate media coverage (World Health Organization, 2008). Other strategies include establishing an organizational response to suicide, identifying individuals at high risk, and educating leaders about the grieving process (for a detailed discussion of postvention responses to suicide in DoD, see Ramchand et al., 2015).

Provider trainings are strategies that build the skills of mental health providers to assess suicide risk and treat individuals at risk for suicide. These are typically trainings in specific therapy techniques for clinical providers, such as Dialectical Behavior Therapy (DBT) or Counseling on Access to Lethal Means (CALM).

Time-based prevention P⁴ aim to put time and distance between Airmen at risk of suicide and lethal means, such as firearms and toxic substances. Time-based prevention is sometimes referred to as *means restriction* or *means safety*. With regard to firearms, evidence suggests that strategies that refer to “means safety” rather than “means restriction” are significantly more preferable and acceptable and elicit more compliance with safety recommendations (Stanley et al., 2017). However, the AF preferred terminology is *time-based prevention*; *means restriction* should not be used to describe time-based prevention P⁴. Time-based prevention is a new priority for the Air Force. Most completed Airmen suicides involve firearms (69.4 percent; U.S. Department of Defense, 2016). Studies have shown that the availability of firearms in households is associated with a much greater risk of suicide by firearm (Zalsman et al., 2016; Anglemeyer, Horvath, and Rutherford, 2014; Klieve, Barnes, and De Leo, 2009; Grossman et al., 2005). In fact, more than depression, substance use, suicidal ideation (wanting to die), and

geography, the strongest predictor of suicide is access to a gun in the home (Anestis and Houtsma, 2017). Moreover, as many as one in four individuals who decide to complete suicide make their attempt within five minutes of their decision (Simon et al., 2001). Suicide prevention strategies that reduce access to firearms for military personnel at risk of suicide have been shown to be effective (Shelef et al., 2016). Other time-based prevention strategies include limiting the availability of large quantities of medications (e.g., only providing them in small amounts at a time or in blister packs), toxic pesticides, and natural gases (for a discussion on time-based prevention strategies and their expected outcomes, see Barber and Miller, 2014).

The *Air Force Guide for Suicide Risk Assessment, Management, and Treatment* (Spangler and Holloway, 2014) recommends time-based prevention for Airmen at risk for suicide, such as those placed on the High Interest Log (HIL). In most cases of Airman suicides involving firearms, the firearm was non-military issue (56.1 percent of all suicides; U.S. Department of Defense, 2017). DoD recommendations for time-based prevention strategies include providing voluntary access to gun locks and other safe storage on non-military property (DoDI 6490.16). Although DoD

components may not place any requirements on or collect any data related to lawful possession of privately owned firearms, commanders and health professionals can ask for and collect information on private firearms and weapons if they have reasonable grounds to believe the service member is a risk to themselves or others (DoDI 6490.16).

Information on methods used in completed and attempted suicides is available from your installation's Director of Psychological Health or Suicide Prevention Program Manager, in the form of quarterly reports of aggregated data on suicide trends. AF-wide information is available from the current DoDSER (<https://dodser.t2.health.mil/>).

APPENDIX C

USING SUICIDE STATISTICS

The Centers for Disease Control and Prevention's National Center for Health Statistics tracks suicide trends in the U.S. population (www.cdc.gov/nchs). The most accurate representation of suicides in the military is DoD's Quarterly Suicide Report, published 90 days after the end of every quarter. The number of reported suicides is broken out by military service and component. The information is revised with each edition so that it reflects the best available data on suicides in the military. Because of the concise and timely nature of the report, DoD provides raw count data and does not provide estimates on the *rate* of suicide. The suicide rate is the number of suicide deaths per 100,000 people. Estimating the rate of suicide allows limited comparisons that are somewhat more meaningful than raw counts because they use the number of individuals who died by suicide as a portion of the total number of service members. The rate of suicide in the military is tracked and reported in the DoDSER. The DoDSER is both the reporting mechanism for suicides in the military and an annual summary report of trends over the past three years.

The DoDSER is maintained and published by the Defense Suicide Prevention Office (www.dsppo.mil), which also periodically publishes fact sheets and information on best practices in suicide prevention in the military. In addition to suicide rates, the DoDSER includes some descriptive information on the characteristics of those who died by suicide.

Because suicide is a rare event, it is not meaningful to compare suicide rates or numbers of suicide deaths across installations at a single point in time or within an installation over a short span of years. The number of suicide deaths at the installation or MAJCOM level will almost always be too low to detect meaningful differences. Suicide rates are estimated at the number of suicide deaths per 100,000 people, which means that the suicide rate for an individual installation will be an inaccurate estimate for the comparatively smaller number of people on an installation. DoDSER suicide rates also should not be used as direct comparisons between adjacent years at the installation level. Comparisons across military services, components, or the U.S. populations are also subject to misinterpretation because of differences in the demographic compositions across the groups compared. We recommend that CATs review their suicide trends data and include them in the Data Catalog Tool because they are important to framing the overall issue of suicide on their installation. However, a CAT should never rely solely on this data to identify its priority problems.

One of the issues with suicide trends data is that a determination of death by suicide is somewhat subjective. The generally accepted definition of suicide, and the definition used in the DoDSER, is *a self-inflicted death with evidence of intent to die*. Evidence of intent can be explicit (e.g., an individual stating their intent to die by suicide), but it also can rely on subjective interpretation of information (e.g., incidents reported in behavioral health and personnel records).

The DoDSER is not recommended as a source for information about relative risk and protective factors for suicide, although it does include descriptive information about characteristics of those who died by suicide. Some DoDSER items are subjective, such as whether the service member had experienced recent problems with a coworker or supervisor. The DoDSER also allows users entering the data to select "data unavailable" when reporting on aspects of a suicide death or attempt. This means that some factors may be underreported because they are unknown—for example, family history of mental illness or unreported previous suicide attempts. The DoDSER

recommends relying on scientific studies whose intended purpose is to evaluate the relative contribution of risk and protective factors in predicting suicide.

APPENDIX D

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