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Designing an Integrated Approach to Prevent Multiple Harmful Behaviors

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Abstract

This report recommends an integrated approach to preventing multiple harmful behaviors in the Army. The evidence-based approach addresses risk and protective factors associated with multiple behaviors, is aligned with principles of effective prevention, leverages existing Army programs, and addresses anticipated barriers to integrated prevention. The approach includes three lines of effort (LOEs): LOE 1 builds a baseline of protective factors by incorporating life skills into Professional Military Education; LOE 2 builds robust protective factors in units by integrating the existing Holistic Health and Fitness and Comprehensive Soldier and Family Fitness programs; and LOE 3 revitalizes the Commander's Ready and Resilient Council as a data-driven and effective integration mechanism at installations. Executing the integrated prevention concept—with related policy changes, resource allocation, and accountability and evaluation components—will result in an evidence-based primary prevention program focused on long-term skill development, installation-level support, and a climate that reinforces healthy behaviors.

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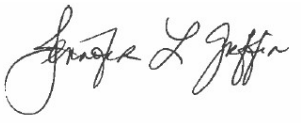
Cover image: U.S Army soldiers enthusiastically respond to Catchpenny, a Minnesota-based band, during a Memorial Day celebration on Contingency Operating Base Basra, Iraq, May 25. The soldiers are assigned to the 34th Infantry Division, which recently took command of Multinational Division South. U.S. Army photo by Pfc. Tyler Mauldin

Approved by: **January 2023**



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Executive Summary

The Department of Defense is promoting an approach to primary prevention of multiple harmful behaviors that addresses risk and protective factors associated with these behaviors in an integrated manner, while maintaining important prevention activities that are unique to specific harmful behaviors [1-2]. Accordingly, the Army Resilience Directorate (ARD) asked CNA to help develop an integrated prevention approach for the Army. CNA began by developing a socioecological model (SEM) specific to the Army. The SEM includes influences on behavior at individual, interpersonal, unit, installation/local community, Army, and society levels. While developing the Army SEM, CNA identified risk and protective factors that are shared among multiple harmful behaviors (suicide, substance abuse, domestic violence, sexual harassment/assault, discrimination, and extremism) at each SEM level and identified principles of effective prevention. Next, CNA evaluated nine Army prevention programs and described the extent to which each program aligns with the Army SEM, principles of effective prevention, and relevant career touchpoints.[1]

This report builds on findings from the previous phases of this study to develop an integrated prevention approach. Specifically, the first phase of this research identified *high-leverage* risk and protective factors that apply to three or more harmful behaviors. Several of these high-leverage factors are built into the resulting integrated prevention approach. Further, the earlier phases of the research highlighted conflicting norms surrounding primary prevention. For example, alcohol misuse is identified as a high-leverage risk factor; however, some units within the Army perceive excessive drinking as condoned and expected behavior. As part of the barrier analysis in this phase of the study, we further explored these conflicting norms. Finally, the principles of effective prevention identified in earlier phases provided important criteria to build into the final recommended integrated prevention approach.

[1] The research described in this paragraph is documented in two previous CNA reports [3-4].

Recommended integrated prevention approach

Our proposed integrated prevention approach leverages existing programs and ensures an evidence-based approach that reaches all Soldiers at appropriate career touchpoints. It encompasses the following three lines of effort (LOEs):

- LOE 1: Builds a baseline of protective factors by incorporating life skills into Professional Military Education (PME)
- LOE 2: Builds robust protective factors in units by integrating the Holistic Health and Fitness (H2F) and Comprehensive Soldier and Family Fitness (CSF2) programs
- LOE 3: Revitalizes the Commander's Ready and Resilient Council (CR2C) as a data-driven and effective integration mechanism at installations

LOE 1 draws on literature that indicates the value of developing and reinforcing life skills and protective factors early in a person's development, or in this case, a Soldier's career. This LOE recommends incorporating specific life skills that act as protective factors at relevant touchpoints in Soldiers' PME. LOE 2 builds on LOE 1 by further developing protective factors during Soldiers' unit-level experiences. Specifically, LOE 2 recommends a merged H2F and CSF2 program that augments and reinforces the expertise of full-time professionals (military, civilian, and contractor) with the distributed presence and relatability of the uniformed CSF2 Master Resilience Trainers (MRTs) within the formations. Finally, LOE 3 seeks to ensure an effective coordinating mechanism for an integrated prevention approach by recommending refinements to the existing installation-level CR2C. Although these LOEs are mutually supportive, it is possible to implement them independently.

Evidence base for recommended approach

We designed the recommended integrated prevention approach to align with risk and protective factors in the Army SEM. Taken together, the LOEs address multiple factors, with a general trend of moving from individual to Army levels of the SEM as one moves from LOE 1 to LOE 3. That is, the emphasis on skill development in both LOE 1 and 2 helps develop protective factors and mitigate against risk factors at the individual level. LOE 2's focus on unit-level H2F/MRT supports connectedness and addresses factors at the interpersonal and unit levels. LOE 3's emphasis on organizational supports addresses factors at the installation and Army levels. Further, our recommended approach aligns with 10 of 11 principles of prevention of multiple harmful behaviors. Finally, we explored industry best practices for program design to ensure that the recommended approach aligns with key program design elements.

As part of this research, we also identified barriers to and opportunities for integrated prevention based on our earlier research and made two site visits to installations to meet with program managers, commanders, and others working in harmful behavior prevention. The LOEs incorporate several opportunities for integrated prevention of multiple harmful behaviors and address several of the barriers that we identified through site visits and research, including building on existing programs that address protective factors (LOE 1 and LOE 2), leveraging the CR2C (LOE 3), and addressing high-leverage risk and protective factors at multiple touchpoints (LOE 1 and 2).

Conclusion

We consider integrated prevention of harmful behaviors as a system that involves influences and interventions at all levels of the Army SEM. The Army's existing prevention programs address risk and protective factors for individual harmful behaviors across the SEM as well as shared protective factors that apply to multiple harmful behaviors. However, the degree of implementation of these programs varies across installations and units, and these programs are primarily focused on single behaviors. Although our research indicates that some coordination among these programs is already occurring, more is needed to truly meet the intent of integrated prevention. Our research also suggests ways in which these existing efforts could be leveraged, systematized, and brought into stronger alignment with the evidence base to create an effective integrated prevention approach. The three LOEs address these leverage points while building on and improving programs and strategies already underway within the Army. Developing the integrated prevention approach around these three LOEs incorporates prior research and existing knowledge and strengths within the Army, helps avoid program overload, and moves the Army toward a proactive, evidence-based prevention program.

Implementing these LOEs would require actions by ARD, the Army Training and Doctrine Command, Army installations, and the operating forces, some of which would require additional resources. In addition, Headquarters, United States Department of the Army (HQDA) would need to make appropriate policy changes and program plans, including revised goals, objectives, and implementation plans and timelines. Moreover, HQDA would need to ensure an appropriate accountability structure that addresses what must be reported or documented and how. If the Army executes this integrated prevention concept, with deliberate emphasis on evaluation from the onset, it will have an evidence-based integrated prevention program focused on long-term skill development, installation-level support, and a climate that reinforces healthy behaviors.

Contents

Introduction

The Army has invested considerable resources in preventing multiple harmful behaviors that include suicide, substance abuse, sexual harassment/assault, domestic violence, discrimination, and extremism. Each harmful behavior (except extremism) has a program of record (POR) dedicated to prevention and response. Further, Army regulations and personnel guide and execute each program. These programs have strategic oversight and tactical execution at the brigade level or below on each installation. Taken together, the Army has a multi-pronged system charged with preventing and responding to harmful behaviors.

The current Department of Defense (DOD) Primary Prevention Plan of Action defines *integrated primary prevention* as addressing "shared risk and protective factors across harmful behaviors through integrated solutions, while maintaining prevention activities that may be unique to a specific harmful behavior" [1]. An integrated prevention approach aligns with the recommendation of the Centers for Disease Control and Prevention (CDC) that prevention programs should address shared risk and protective factors associated with multiple forms of violence [5]. The CDC further recommends using a socioecological model (SEM) that addresses risk and protective factors at multiple levels (i.e., individual, interpersonal, community, and society) [6]. Research has identified numerous factors that increase the risk for and protect against specific harmful behaviors. Of note, many of these risk and protective factors are associated with more than one harmful behavior [3, 7]. For example, healthy relationships and a sense of belonging protect against both interpersonal violence and suicidal ideation [8]. An earlier phase of this research developed an Army SEM of shared risk and protective factors at the individual, interpersonal, unit, installation/local community, and Army levels [3].

In addition, the Army is beginning to roll out the Integrated Prevention Advisory Group (I-PAG), an organizational structure to support integrated primary prevention, in accordance with Office of the Secretary of Defense (OSD) guidance [2]. As currently designed[2], the I-PAG will serve as the Army's prevention workforce, engaging in non-clinical, primary prevention activities that seek to prevent two or more harmful behaviors before they occur. The I-PAG's responsibilities include designing prevention policies and strategies, advising commanders on prevention processes, collaborating with partners to maximize prevention capabilities, and evaluating prevention activities. The I-PAG is distributed across the strategic, operational, and

[2] ARD shared a draft copy of the prevention workforce guide and talked with CNA about their plans for I-PAG development and roll out. The description of the I-PAG here reflects the draft conceptualization of the workforce.

tactical tiers. In assuming responsibility for activities that involve primary prevention of two or more harmful behaviors, the I-PAG will recommend relevant policy and regulation, develop and administer integrated primary prevention activities, and analyze data to evaluate and identify areas in need of improvement. Existing program experts (e.g., suicide prevention program managers, substance abuse prevention managers) will continue to lead training requirements that are part of their program or area of responsibility, including secondary and tertiary prevention.

The Army Resilience Directorate (ARD) asked CNA to help the Army develop an integrated primary prevention strategy that enhances protective factors and mitigates risk factors at appropriate touchpoints across Soldiers' careers and is as consistent and compatible as possible with both the evolving prevention polices and the evolving plans to employ a prevention workforce.

Toward a model of integrated primary prevention

In developing an integrated primary prevention approach, several key issues must be addressed, including identifying shared risk and protective factors and assessing the ability of existing Army prevention programs to address these factors effectively. The following questions guided this effort:

1. Which risk and protective factors are associated with two or more of the target harmful behaviors at each level of an Army-specific SEM?
2. Which approaches and strategies have been shown to help prevent two or more of the target harmful behaviors?
3. Which prevention programs are available to Army units currently? To what extent do the programs address shared risk and protective factors and align with evidence-based prevention approaches? How widely are these programs implemented, who participates in the programs, and at what point in their careers do they participate?
4. What are the barriers to developing and implementing an integrated prevention program?
5. How can the Army build on current prevention programs to reduce the target harmful behaviors more efficiently and effectively through an integrated approach that addresses all levels of the Army SEM?

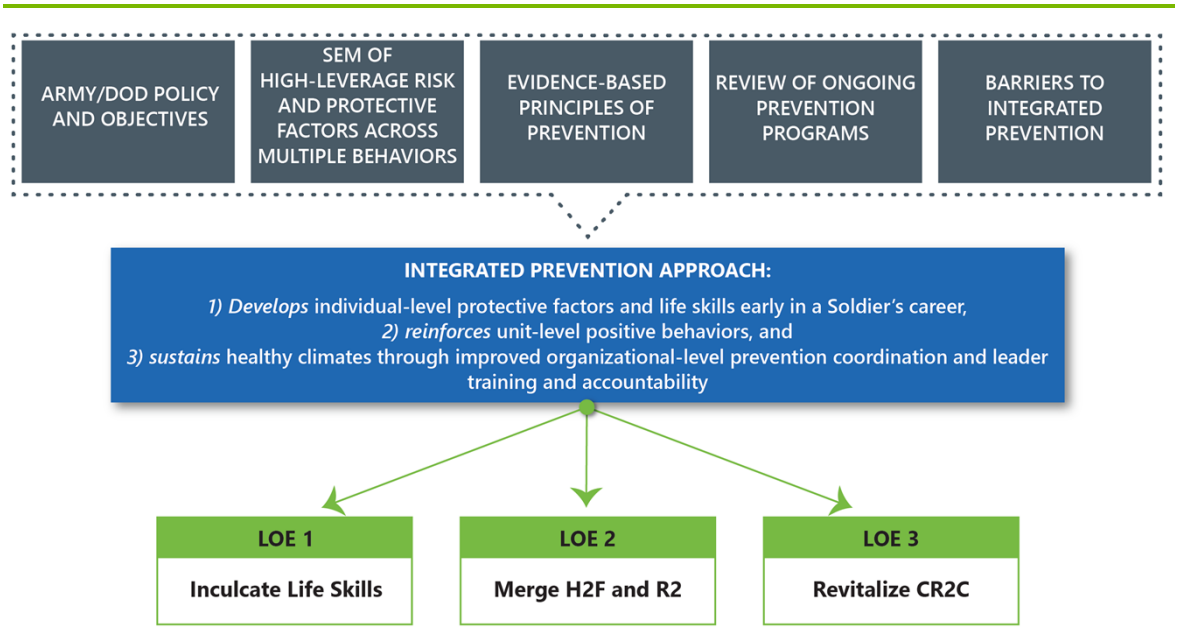
Previous reports addressed the first three questions through literature review, policy document review, and discussions with Headquarters, United States Department of the Army

(HQDA) program experts. This report addresses the fourth question with an opportunities and barrier analysis based on discussions with prevention program stakeholders at two large installations and on the previous findings of this study. Our response to the final question, regarding a recommended approach to integrated prevention, is based on evidence accumulated across all stages of the research.

Approach

Throughout the study, we used literature reviews, document analysis, and discussions with policy/program officials and practitioners iteratively to identify and refine the five key inputs to the recommended integrated prevention approach. Figure 1 depicts these contributions and summarizes the integrated prevention approach.

Figure 1. Development of an integrated primary prevention approach



Source: CNA.

Reviewing Army and DOD prevention policy documents and objectives provided a baseline understanding of how the Army views prevention. It also provided necessary context for our analysis and recommendations because the sponsor asked that our work align with these documents. We generated a six-level Army SEM of shared risk and protective factors for two or more of the following harmful behaviors: suicide, substance misuse, domestic violence, sexual assault/harassment, discrimination, and extremism. We also generated the 11 principles of effective prevention based on seminal civilian research and additional research

on prevention of harmful behaviors in a military context. We reviewed prevention program materials and consulted program managers to determine the alignment between current programs and the Army SEM and principles of effective prevention. This work provided insights into possible prevention programs and activities to consider when designing an integrated prevention approach. We then visited two strategically selected Army installations to explore opportunities for integrated prevention and related barriers that might arise.

Finally, to increase the likelihood that our recommended approaches for integrated prevention were practical and aligned with Army needs, we shared and discussed a draft of the recommended prevention approach with ARD personnel during two brainstorming sessions and refined recommendations based on their feedback. As a final step, we conducted a brief review of the organizational program design literature to ensure that our recommended approach aligned with best practices for program design. The resulting recommended integrated prevention approach was designed to leverage existing programs and ensures that an evidence-based prevention approach reaches all Soldiers at appropriate career touchpoints.

Organization of report

The next section of this report describes the evidence base for the recommended integrated prevention approach. It includes a description of shared risk and protective factors in the Army SEM, as well as the principles of effective prevention. It also provides an overview of existing Army prevention PORs and their alignment with the SEM and prevention principles. Further, this section briefly describes barriers to and opportunities for integrated prevention. Most of the remainder of this report describes our recommendations for an integrated prevention approach. First, we describe an overall concept for integration based on three lines of effort (LOEs). Second, we describe each LOE in detail, including how each LOE leverages existing programs. We also discuss how to evaluate each LOE. Third, we describe how the integrated prevention concept aligns with the evidence base. A brief conclusion suggests next steps for the Army to execute the recommended integrated prevention approach.

Evidence Base for the Development of an Integrated Prevention Approach

The analytical activities of this study provided an evidence base and rationale for developing an integrated prevention approach. The first phase developed an Army SEM that includes shared risk and protective factors for two or more harmful behaviors that an integrated prevention program should address. It also identified principles of effective prevention of harmful behaviors as the approach should align with these principles. The second phase described the current state of Army prevention PORs and discussed their alignment with the Army SEM, touchpoints across a Soldier's career, and the principles of effective prevention. The third phase identified opportunities for and barriers to integrated prevention and also briefly reviewed the program design literature. Results from these analytical activities are summarized below.

The Army SEM

SEMs of prevention are based on the concept that individual behavior and experiences are shaped by multiple levels of influence, including individual characteristics, interpersonal relationships, and organizational, community, and societal influences [9-11]. In developing an Army-specific SEM, we identified six levels of influence in the Army context: individual, interpersonal, unit, installation/local community, Army, and society. Then, we identified risk and protective factors for each harmful behavior at each SEM level, and we included in the Army integrated SEM those factors that were associated with at least two of the harmful behaviors. The resulting Army SEM provides a starting point for integrated prevention and consists of 40 shared risk factors and 15 shared protective factors, which are listed in Table 1. As depicted, the evidence base is much stronger for risk factors than for protective factors, and for factors at the individual level compared to other levels. The full Army SEM that shows the factors associated with each behavior is provided in Appendix A: Army SEM of Shared Risk and Protective Factors.

Table 1. Army SEM of shared risk and protective factors[a]

SEM Level	Risk Factors	Protective Factors
Individual: Includes personality traits, skills and abilities, circumstances, and personal history	Low education attainment Gender: male Poor mental health Age: young adult Antisocial and aggressive behavior Marital status: unmarried Impulsivity Financial stress Past exposure to trauma/abuse Alcohol misuse Unhealthy or dysfunctional parenting Low socioeconomic status (SES) Deployment Non-heterosexual orientation Gender: female Lower rank: junior enlisted or junior officer Combat exposure Hostile gender attitudes and beliefs Previously committed the harmful behavior Rank: enlisted Race/ethnicity: non-Hispanic white Combat arms occupation Sexual identity crisis Poor physical health or recent medical issue Low self-esteem	Life skill: decision-making/problem-solving Life skill: empathy Positive affect High academic achievement Marital status: married Spirituality/religiosity
Interpersonal: Includes factors associated with close relationships (e.g., intimate partners, family members, friends, acquaintances with whom one interacts with frequently)	Association with unhealthy dysfunctional peer groups Isolation/lack of social support Close-relationship stressors	Social connectedness and support Family cohesion and support Healthy peer relationships
Unit: Includes factors within the military unit that influence a person's behavior, such as	Stigma associated with reporting/seeking help Toxic/permissive unit climate	Unit cohesion and connectedness Positive leadership engagement

SEM Level	Risk Factors	Protective Factors
leadership approaches, unit-level policies, operational tempo, nature of unit occupations, peer interactions and support, and unit cultural norms and expectations	Toxic/ineffective or weak leadership	Unit-level policy enforcement
Installation/ local community: Includes factors at the military base and surrounding community that influence individual behavior, including access to resources and characteristics, policies, and practices in the community	Availability of alcohol Access to location or methods Social/community disorganization Low community SES	Community connectedness and support Restrict or limit access to instruments of harmful behavior
Army: Includes factors related to Army culture, policies, and practices as well as practices and values espoused and modeled by senior leaders	Stigma associated with reporting/seeking help Harmful norms (gender, violence, drinking) Structural barriers to accessing help/resolution	Prevention policies
Society: Includes state and federal policies as well as broader culture, subcultures, and political trends and movement	Weak policy/law Weak economic conditions	(None Identified)

Source: CNA [3].
[a] Shared risk and protective factors apply to two or more of the following harmful behaviors: suicide, substance abuse, domestic violence, sexual harassment/assault, discrimination, or extremism.

Principles of effective prevention

To develop principles of effective prevention, we reviewed the general prevention literature as well as the literature on effective prevention of each of the target harmful behaviors. The final set of principles, listed in Table 2, encompasses principles that have been shown to be effective in preventing two or more of the target behaviors.

Table 2. Principles of effective prevention

	Principle	Definition
Content	Socioculturally relevant	Programs address the cultural and social norms of the target audience, respecting their values, beliefs, and language while acknowledging grievances, correcting misconceptions, and promoting positive norms that protect against harmful behaviors.
	Theory-driven	Programs are based on well-established empirically supported theory about the causes of the behavior and related risk and protective factors a program should address to influence the desired outcomes.
	Comprehensive	Programs encompass multiple components from awareness to skill building to resource support and include universal and targeted interventions at multiple SEM levels (e.g., individual, relationships, work environment, community, society).
	Skills-oriented	Programs develop social and emotional skills that protect against harmful behaviors, including communication, self-efficacy and empowerment, self-regulation, healthy relationships, critical thinking, problem-solving, stress management, coping, empathy, risk avoidance, and conflict resolution.
	Fosters positive relationships	Programs foster safe, trusting relationships within the training context and in participants' social and work environment, including promoting social connectedness, bystander strategies, peer organizations, and mentoring.
Delivery	Delivered by well-trained, qualified, committed, and supported staff	Program staff are sufficiently trained and qualified, supported by the administration, and committed to program goals. Peer facilitators are included in program development and implementation.
	Appropriately timed	Programs are timed to reach participants as early in life as possible, when they are most receptive to change, at key transition points, or when they are at potentially heightened risk.
	Of sufficient dosage and intensity	Programs are of sufficient depth, length, and frequency (including refreshers) to support sustained changes in attitudes and behavior.
	Actively engaging	Programs use varied teaching methods (e.g., small group discussion, role-playing, skill practice) that actively engage participants and allow them to learn and practice new skills.
Policies	Incorporates systematic evaluation and refinement	Programs have clear goals and objectives, results are systemically evaluated relative to the goals (including gathering participant feedback), and refinements are made to improve effectiveness.
	Accompanied by victim-centered response efforts	Response efforts ensure support for victims, including ensuring privacy and confidentiality, providing advocacy and counseling, ensuring safety, maintaining zero tolerance for retaliation, and offering amnesty for collateral misconduct.

Source: CNA [3].

Army prevention programs

In the second phase of our research, ARD requested that we analyze the eight Army prevention PORs related to the target harmful behaviors, as well as the Army's Military Equal Opportunity (MEO) program. Some of these programs are designed to prevent or respond to specific harmful behaviors (e.g., suicide, substance misuse); others seek to develop positive behaviors (e.g., resilience, fitness) that can protect against harmful behaviors. The goal was to analyze the extent to which the main components of each program addressed the shared risk and protective factors in the Army SEM, were offered at key career touchpoints, and aligned with the principles of prevention. The details of our analysis and findings are summarized in a previous report for this project [4]. We briefly summarize each program below:

- The *Army Suicide Prevention Program* (ASPP) seeks to reduce the risk of suicide for Active Army and Reserve Component Soldiers, Army civilians, and Army family members [12].
- The *Army Substance Abuse Program* (ASAP) provides alcohol abuse, substance abuse, and gambling disorder prevention and control policies, procedures, and responsibilities for all Army components, Department of the Army civilians, and other eligible personnel [13].
- The *Family Advocacy Program* (FAP) promotes public awareness, prevention, and early identification of child abuse and neglect, domestic abuse, and problematic sexual behavior in children and youth [14].
- The *Sexual Harassment/Assault Response and Prevention* (SHARP) program is an "integrated, proactive effort to end sexual harassment and sexual assault within [its] ranks." It aims to "foster a culture free of sexual harassment and sexual assault through prevention, education and training, response, victim support, reporting procedures, and establishing appropriate accountability" [15].
- The *Military Equal Opportunity* (MEO) program aims to create a cohesive and combat-ready Army by ensuring that every Soldier is treated with dignity and respect regardless of race, color, gender, religion, age, disability, or national origin [16].
- The *Financial Readiness Program* (FRP) provides comprehensive personal financial educational and counseling services to Soldiers and their families [17]. This program is included because of its potential to prevent financial stress that can contribute to harmful behaviors.

- The *Comprehensive Soldier and Family Fitness* (CSF2) program, a component of the over-arching Ready and Resilient (R2) program, is a resilience-building program that is required of all Soldiers across the career span and encouraged for families and Army civilian personnel. It aims to increase the physical and psychological health, resilience, and performance of participants so that they can thrive and meet a wide range of operational demands [18].
- The *Holistic Health and Fitness* (H2F) program is a daily program of face-to-face instruction that seeks to optimize Soldiers' physical and non-physical performance. When the program is fully implemented, Soldiers will receive H2F programming throughout their careers, from initial through sustainment training, delivered by unit-owned teams of interdisciplinary experts on unit-owned equipment in unit-owned facilities [19].
- *Strong Bonds*, recently renamed *Building Strong and Ready Teams,* is a unit-based program intended to develop resilience in Army families across the Active, Reserve, and National Guard components. Strong Bonds is targeted to four specific groups of Soldiers: those who are single, married, in families, or pre/post deployment [20].

The extent to which the PORs and the MEO program address risk and protective factors in the Army SEM, occur at relevant touchpoints, and align with the principles of effective prevention is described fully in our earlier report [21]. Key findings are summarized below.

Program alignment with Army SEM

Our analysis revealed that existing Army PORs address 75 percent or more of risk and protective factors in the Army SEM. A higher percentage of protective factors than risk factors are addressed. Fewer factors are addressed, however, when one considers only the mandatory program components: 10 of 15 protective factors. In addition, commanders have considerable discretion in prioritizing implementation of the PORs, and some programs also allow for variation in implementation at the unit level. Although this flexibility allows for adapting to the schedule, requirements, and composition of the unit, spreading prevention efforts across multiple programs *and* involving so many discretionary components makes it difficult for the Army to ensure that all Soldiers receive sufficient coverage of the shared risk and protective factors.

Program alignment with relevant career touchpoints

Our analysis revealed that primary prevention education is required at numerous relevant touchpoints throughout a Soldier's career. However, as noted above, implementation of many of these programs can vary based on commander discretion and program flexibility. The training in programs focused on developing positive behaviors (e.g., FRP, CSF2) occurs at several relevant touchpoints. However, most of the mandatory training focused on preventing

specific harmful behaviors (e.g., SHARP, ASPP) emphasizes response rather than primary prevention.[3] We believe that expanding mandatory training to address a broader set of risk factors and protective factors would not necessarily take more time if the Army integrated programs to reduce redundancies and make the most efficient use of touchpoints where training occurs.

Program alignment with principles of effective prevention

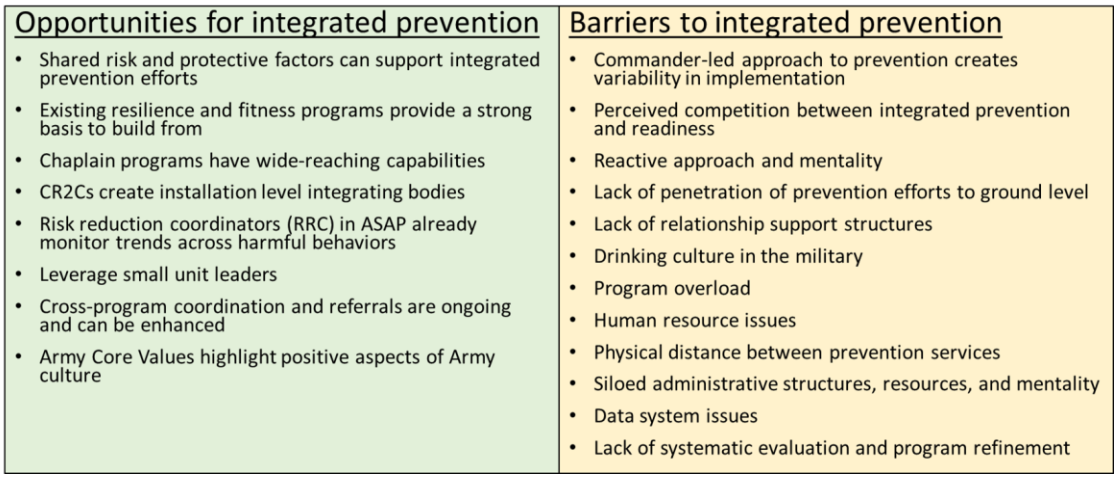
Our analysis revealed that programs focused on developing positive behaviors align better with effective prevention principles than do programs created to deter specific harmful behaviors. Among the programs focused on specific harmful behaviors, ASAP is least aligned with prevention principles, which is concerning because alcohol misuse is a risk factor for other harmful behaviors. The most consistently represented principle across prevention programs is *appropriately timed* (i.e., mandated training touchpoints exist for many of the programs), and the least represented principle is *systematic evaluation and refinement*. Overall, our analysis indicates that CSF2/R2 and H2F offer promising models for developing an integrated prevention program because of their existing alignment with the principles of effective prevention.

Opportunities for and barriers to integrated prevention in ongoing Army activities

We identified eight opportunities for and 12 barriers to integrated prevention (depicted in Figure 2). We identified these opportunities and barriers during the first two phases of our research, supplemented by two site visits to large Army installations and additional discussions with program officials. A more detailed approach to identifying the barriers and opportunities, along with more detailed discussion of the results, can be found in Appendix B: Opportunities for and Barriers to Integration

[3] We note that ASPP *is* focused largely on primary prevention, but the one-hour mandatory training is not.

Figure 2. Opportunities for and barriers to integrated prevention



Source: CNA.

Opportunities for integrated prevention include emphasizing positive aspects of Army culture, engaging small unit leaders, and leveraging existing programs that address multiple risk and protective factors (like H2F, CSF2, chaplain program, and behavioral health). An additional opportunity is to leverage an existing entity for coordinating an integrated prevention approach: the Commander's Ready and Resilient Council (CR2C). The CR2Cs (discussed more fully later in the report) are intended to coordinate prevention efforts by bringing installation services and decision-makers together regularly to identify and address issues and data trends.

Identified barriers to integration include enterprise-wide issues related to perceived competition between integrated prevention and readiness, data system integration issues, and lack of systemic evaluation and program review. Other barriers, though still large in scope, directly affect the Soldiers and their experience with prevention; they include program overload, disconnect between substance misuse prevention and the drinking culture in the military, and the variability in implementation of commander-led programs.

Program design best practices

As a final step in ensuring a solid evidence base, we conducted a brief literature review on organizational program design to confirm that our integrated prevention recommendations align with best practices for program design. The search encompassed a few key sources from general organizational design and program design focused on prevention, primarily in the

medical field. Further, we included the DOD's Prevention Plan of Action (PPOA) 2.0 that describes important elements of prevention program design. The literature review produced a set of 12 important elements of program design, which we organized into the four categories of human resources, governance, infrastructure, and design. The elements listed in Table 3 are either amalgamations of common themes found throughout the literature or themes particularly salient to the study.

Table 3. Effective practices for program design

Category	Element
Human Resources	Leadership: Central figure or champion Prevention workforce Flexible talent and reward systems
Governance	Seamless transition across services and resources Transparent and shared decision-making
Infrastructure	Services embedded at local level Integrated budgets Adequate resources
Design	Continuous evaluation and refinement Agile and adaptive design Integration mapping Positive framing

Source: CNA.

Implications of the previous research for integrated primary prevention

The first phase of this research is unique as it applies a SEM for prevention of multiple harmful behaviors at multiple levels of influence including those that are specific to the Army (e.g., unit, installation, and Army). The *high-leverage* shared risk and protective factors in the Army SEM—meaning those that are associated with three or more harmful behaviors—need to be addressed explicitly in an integrated prevention program because they can help prevent multiple harmful behaviors. The mailability of these high-leverage factors varies considerably (e.g., gender or race vs. healthy peer relationships). As such, approaches to address various factors will also vary. High-leverage risk and protective factors are listed in Table 4.

Table 4. High-leverage risk and protective factors

SEM-level	Risk Factor	Protective Factor
Individual	• Low education attainment • Gender: male • Poor mental health • Age: young adult • Marital status: unmarried • Financial stress • Rank: enlisted • Past exposure to trauma/abuse • Antisocial aggressive behavior • Impulsivity • Alcohol misuse • Unhealthy or dysfunctional parenting • Low SES • Deployment • Non-heterosexual orientation • Gender-female • Lower rank: junior enlisted or junior officer • Combat exposure • Hostile gender attitudes and beliefs • Previously committed the harmful behavior	• Life skill: decision-making/problem-solving • Life skill: empathy • High academic achievement
Interpersonal	• Isolation/lack of social support • Close-relationship stressors • Association with unhealthy/dysfunctional peer groups	• Social connectedness and support • Family cohesion and support • Healthy peer relationships
Unit	• Stigma for reporting/help-seeking • Toxic or permissive unit climate	• Unit cohesion and connectedness • Positive leadership engagement • Unit-level policy enforcement
Installation/local community	• Availability of alcohol • Access to location or methods	• Community connectedness and support • Restrict or limit access to instruments of harmful behavior
Army	• Harmful norms • Stigma associated with reporting/help-seeking • Structural barriers to accessing help/resolution	• Prevention policies

SEM-level	Risk Factor	Protective Factor
Society	• Weak policy/law • Weak economic conditions	

Source: CNA.

The first phases also highlighted conflicting norms relevant to shared risk and protective factors. Alcohol misuse is identified as a high-leverage risk factor; however, there is a perception that excessive drinking is condoned and expected in units. Discussions with multiple subject matter experts (SMEs) (including those outside the ASAP program) confirmed that addressing drug use in the formation is consistently supported across the force, but alcohol misuse is not universally defined or acknowledged as risky behavior. Another conflicting norm identified was the stigma associated with help-seeking and reporting. This is a risk factor for four behaviors, and although there are many Army-wide messages that encourage help-seeking and reporting (both for yourself and others), the stigma persists. This suggests that the counter-stigma messages are not universally received.

Further, the Phase 1 principles of effective prevention of harmful behaviors serve as a framework for evaluating existing and new integrated prevention approaches. The analysis conducted in Phase 2 identified high-leverage programs (e.g., H2F and CSF2/R2) that are designed to develop positive behaviors, address many shared protective factors, occur at multiple touchpoints within units, and are generally well-aligned with the principles of effective prevention. The analysis also indicated that current prevention PORs are most strongly aligned with the following principles of effective prevention: theory-driven, skills-oriented, delivered by qualified staff, and appropriately timed—elements that should be retained when moving to an integrated prevention approach. Similarly, an integrated prevention program should rectify the principles that lack alignment with existing PORs: fostering positive relationships, providing training of sufficient dosage, and incorporating systematic evaluation. Finally, although several prevention PORs occur at multiple, relevant touchpoints, prevention programs could be more thoroughly incorporated early in a Soldier's career (e.g., pre-accession, first full-duty station, and when new to a unit). As an example, orientation or in-processing could provide an opportunity to address skill-building protective factors early in a Soldier's career and tenure in a unit.

The insights from Phases 1 and 2 identified opportunities for integrated prevention as well as initial ideas of potential barriers to integrated efforts. Site visits to Army installations provided important ground-level perspectives that helped refine, contextualize, and analyze the opportunities and barriers. For example, we learned about different approaches and challenges to implementing the CR2C, which informed our recommendations to revitalize CR2Cs (discussed in the next section).

Recommended Integrated Prevention Approach

The integrated prevention approach to harmful behavior reduction proposed in this section draws from the Army SEM of shared risk and protective factors, evidence-based principles of effective prevention, program design best practices, and Army/DOD prevention policies. The DOD PPOA 2.0 (p. 5) describes the prevention process as a "data-driven effort involving four main steps: understanding the problem, developing a comprehensive approach, quality implementation, and continuous evaluation" [1]. The four steps are reflected in our research and the resulting recommendation as summarized below:

- **Understanding the problem:** To fully understand harmful behaviors and harmful behavior prevention in the military in general and the Army in particular, we extensively reviewed the prevention literature, including documents from inside and outside the military. We also relied on information from program experts and users.
- **Developing a comprehensive approach:** The recommended integrated prevention approach addresses individual, interpersonal, unit, installation/local community, and Army levels of the Army SEM. It seeks to develop Soldiers' resilience, from awareness to understanding to skill development over time. It also recommends universal (for all Soldiers) strategies as well as strategies targeted to specific group and unit needs.
- **Assuring quality implementation:** Each recommendation is linked to principles of effective prevention and program design best practices and includes a description of how to maximize alignment with those principles and practices.
- **Practicing continuous evaluation:** The recommendations offer a phased approach that builds evaluation mechanisms into each phase.

Concept

The proposed integrated prevention approach has three LOEs that leverage existing programs to ensure an evidence-based prevention approach that reaches all Soldiers at appropriate career touchpoints. They are the following:

- LOE 1: Builds a baseline of protective factors by incorporating life skills into Professional Military Education (PME)
- LOE 2: Builds robust protective factors in units by integrating the H2F and CSF2 programs

- LOE 3: Revitalizes the CR2C as a data-driven and impactful integration mechanism at installations

LOE 1 draws on literature that indicates the value of developing and reinforcing life skills and protective factors early in a person's development, or in this case, a Soldier's career [22-23]. This LOE recommends incorporating specific high-leverage skills that act as protective factors into current PME programs at relevant touchpoints in Soldiers' careers. LOE 2 builds on LOE 1 by further developing protective factors during Soldiers' unit-level experiences through a merged H2F and CSF2 program that augments and reinforces the expertise of full-time professionals (i.e., military, civilian, and contractor) with the distributed presence and relatability of the uniformed CSF2 Master Resilience Trainers (MRTs) within the formations. LOE 3 seeks to ensure an effective coordinating mechanism for an integrated prevention system by recommending refinements to the existing installation-level CR2C. Although these LOEs are mutually supportive, it is possible to implement them independently.

Rationale

We consider integrated prevention of harmful behaviors as a system that involves influences and interventions at all levels of the Army SEM. The PPOA defines *integrated primary prevention* as addressing "shared risk and protective factors across harmful behaviors through integrated solutions, while maintaining prevention activities that may be unique to a specific harmful behavior" [1]. The Army's existing prevention programs address risk and protective factors for individual harmful behaviors across the SEM as well as shared protective factors that apply to multiple harmful behaviors. However, the degree of implementation of these programs varies across installations and units, and these programs are primarily focused on single behaviors. Although our research indicates that some coordination among these programs is already occurring, more is needed to truly meet the intent of integrated prevention. Our research also suggests ways in which these existing efforts could be leveraged, systematized, and brought into stronger alignment with the evidence base to create an effective integrated prevention approach. The three LOEs address these leverage points while building on and improving programs and strategies already underway within the Army. Developing the integrated prevention program around these three LOEs incorporates the research and existing knowledge and strengths within the Army, helps avoid program overload, and moves the Army toward a proactive, evidence-based primary prevention program rather than the response-oriented approach of the past.

Implementing these LOEs would require actions by ARD, Army Training and Doctrine Command (TRADOC), Army installations, and the operating forces, some of which would require additional resources. In addition, HQDA would need to make appropriate policy changes and program plans, including goals, objectives, and implementation plans and

timelines. HQDA would also need to ensure an appropriate accountability structure that addresses what information must be reported or documented and how.

Organization of this section

For each LOE, we describe the overall concept and rationale. We follow the LOE description with recommended next steps (dubbed Phase 1). Actions in Phase 1 could be initiated with little additional research to begin to implement the concept. Each LOE also has additional recommended phases; these later phases may require additional research or SME input. Finally, each LOE section also has a description of how evaluation would be incorporated into the implementation of the LOE.

LOE 1: Inculcate life skills/protective factors early and reinforce at strategic touchpoints

Concept overview

LOE 1 aims to enhance existing efforts by ensuring that life skills education begins at initial entry into the Army and is refreshed and enhanced at key touchpoints along the career continuum. Earlier phases of this research identified two life skills (decision-making as well as problem-solving and empathy) as shared protective factors that should be incorporated into life skills training. Given the relationship between alcohol misuse and multiple harmful behaviors, responsible drinking education should be incorporated into life skills training. Life skills related to resilience, connectedness and responsible drinking behaviors are present in two existing Army programs that are typically experienced by Soldiers after they arrive at their assigned duty stations.[4] LOE 1 recommends incorporating skills from these programs earlier in Soldiers' careers, beginning with Basic Combat Training (BCT). This LOE can be initiated and begin providing life skills training while additional comprehensive integrated prevention programs are developed.

Rationale

Research on developing protective factors indicates the importance of inculcating broadly applicable life skills (e.g., decision-making, problem-solving, or self-regulation) early in one's development, ideally well before adulthood [22-23]. However, the Army recruits persons from

[4] Resilience skills are taught by unit-level MRTs (a key component of CSF2), and the ASAP's *Prime For Life (PFL)* course is given to Soldiers after substance misuse has occurred.

all backgrounds, and they do not all arrive with the same depth of life skills. LOE 1 proposes to develop, in all Soldiers, broadly applicable resilience and general life skills that can help prevent multiple harmful behaviors. Providing early life skills training to the most junior service members—a higher risk group[5]—is intended to provide universal prevention to all Soldiers, raise the overall "life skills quotient" in the Army, and change the culture by changing expectations from the outset. The Navy currently has a program similar to the one proposed here in which life skills are taught between bootcamp and A-school[6] [22].

In addition to the literature supporting early life skills training, a recent study by the Walter Reed Army Institute of Research (WRAIR), conducted with a sample of Soldiers in BCT, demonstrates that mental skills training incorporated into BCT had positive effects on subsequent performance and confidence in Soldiers compared to those who did not receive the training. The mental skills included goal-setting, sustained attention, and personally meaningful attributions, among other skills [24]. Although the effects were small (and frequently moderated by gender and previous experience), the use of a military sample of BCT Soldiers makes the findings especially relevant and worthy of further exploration in LOE 1. Similar to the WRAIR study, we recommend a pilot to determine the effects of this training.

Life skills to incorporate into BCT

Several life skills identified in this research are already addressed in the MRT program, which covers a broad set of resilience skills. In addition, skills associated with responsible drinking are covered in the Prime for Life (PFL) course. LOE 1 recommends that the Army capitalize on these established programs while building a more deliberate integrated prevention program.

As described in earlier phases of our research [21], the CSF2 program seeks to develop Soldiers' resilience skills primarily through unit-based MRTs. MRTs are noncommissioned officers (NCOs) who participate in an intensive, two-week course that provides training on 14 skills related to the following competencies: self-awareness, self-regulation, optimism, mental agility, strengths of character, and connection. The course consists of the following three components:

- Preparation (5 modules, 7.5 days): This component includes a resilience overview, building mental toughness, identifying character strengths in self and others, and strengthening relationships.

[5] High-leverage risk factors identified in the Army SEM include being a young adult, of lower rank, and enlisted. In addition, many Soldiers in BCT are also unmarried—another high-leverage risk factor.

[6] A-school is akin to the Army' MOS school for initial entry training.

- Sustainment (1 module, 1 day): This component focuses on reinforcing resilience skills over the course of a military career and applying the skills in a military-specific context.
- Enhancement (1 module, 1 day): This component, which is based on sports psychology concepts, encompasses mental skill building, building confidence, goal-setting, and attention control [25].

SMEs who have participated in the MRT course describe it as highly relevant and impactful. At the end of the two-week training, the NCOs are expected to return to their formations to teach these skills to other Soldiers. Army regulation requires that MRTs provide unit-level resilience training on a regular schedule, ensuring that all 14 MRT skills are taught to each Soldier at least once every 12 months [18]. However, the unit-level MRT position is a collateral duty, and once MRTs are back in their unit, use of those new skills varies based on the experience and interest of the commander, including commitment to providing time for the MRT to teach the skills. Our discussions with Army SMEs indicate considerable variability in the usage of these resources. For example, one SME we spoke to indicated that some unit leaders did not know whether the MRT program is still "happening."

In addition to the MRT skills training, LOE 1 recommends incorporating responsible drinking education into Soldiers' early training as a high-leverage prevention strategy. Responsible drinking education provides tools to navigate situations where alcohol is readily available and excessive consumption is encouraged. We recommend the Army incorporate into BCT all or parts of the existing PFL course, which is designed to "change drinking and drug use behaviors by changing beliefs, attitudes, risk perceptions, motivations, and the knowledge of how to reduce their risk of alcohol and drug-related problems throughout their lives" [26]. PFL is currently only offered to those who have demonstrated risky substance use behaviors (e.g., driving while intoxicated). Although we did not have access to the full PFL curriculum, available evidence indicates that PFL is a research-based training course that provides participants with understanding of how alcohol- and drug-related problems develop and how they can be prevented. Led by a certified instructor and using a variety of presentation media including images, animations, and video, PFL includes learning units that address individual risk perceptions, provide information about the progression toward addiction (including an opportunity for individual self-assessment), and prepares individuals for personal change [27].

The PFL program includes both prevention and intervention content to serve Soldiers with a variety of needs. For example, Fort Wainwright (Alaska) offers a five-hour PFL course that provides general information about addiction and strategies for behavioral change, as well as a 12-hour course for those with a recent alcohol- or drug-related incident [27-28].

In developing the responsible drinking component of LOE 1, ARD may wish to also examine responsible drinking programs that have been effective in university settings. For example, more than 500 US colleges and universities use AlcoholEdu, a 60-to-90-minute alcohol

awareness, prevention, and training program administered to all first-year students regardless of individual risk factors. This program received the highest effectiveness rating from the National Institute on Alcohol Abuse and Alcoholism (NIAAA)[7] [29]. This universal approach creates common knowledge and a shared experience among the first-year class that shapes campus drinking culture. The virtual training program consists of seven modules that include interactive features such as decision-making exercises based on scenarios, pre- and post-course surveys, and a final exam. The program is customized to each student based on self-reported drinking habits and personal goals and can also be customized to the institution by incorporating institution logos, policies, and custom survey questions. The program's online format ensures quality and fidelity across institutions [30-31].

Implementation phases

Phase 1

We recommend starting a pilot with two or three BCT courses (and possibly with two to three Basic Officer Leader Courses (BOLC)). This pilot could entail incorporating a shortened version of the MRT Level 1 course and responsible drinking components of the PFL (or similar) course into early training and education for all Soldiers, starting with basic training and incorporating subsequent training touchpoints for a junior audience. A revised MRT course would have a different purpose than the ongoing MRT course (which trains NCOs to provide MRT skills training to others). The modified course for BCT and BOLC would build foundational MRT skills in the participating Soldiers. MRTs in units would function as they do now and would reinforce the skills obtained in training. Content should be based on identified cross-cutting risk and protective factors and could include the following MRT skills:

- *Problem-solving*, which involves identifying causes and solution strategies
- *Energy management, detect icebergs (that fuel out-of-proportion emotions and reactions), put it in perspective, mental games*, and *real-time resilience* to address issues related to mental health
- *Hunt the good stuff* and *avoid thinking traps* to mitigate antisocial and aggressive behavior

[7] The NIAAA effectiveness rating was based on six rigorous studies conducted by independent investigators. Studies found the program resulted in a statically significant drop in alcohol use, binge drinking, and negative alcohol-related consequences during students' first term on campus, a particularly high-risk period. AlcoholEdu notes the program must be part of a larger comprehensive approach to promoting students' wellness on campus past their first term. The program provides an initial foundation on which other campus programs and policies can build.

- *Goal-setting* and *ATC (separating Activating event from Thoughts and Consequences)* to mitigate impulsivity

In addition to the MRT skills, responsible drinking modules should emphasize how to make social connections without drinking, alcohol refusal techniques, and coping skills to mitigate the likelihood of alcohol misuse. Interactive sessions could include micro-applications that demonstrate how each of the life skills can help prevent specific harmful behaviors (e.g., practicing empathy through bystander intervention in cases of sexual harassment).

We recognize that time in BCT is valuable. Thus, it is imperative to pilot these concepts and determine the extent to which the interventions affect subsequent behavior. We discuss this further in the evaluation section for this LOE.

Phase 2

Phase 2 of this LOE would ensure that leaders enhance their own life skills and are equipped to reinforce resilience skills in the Soldiers they lead. Phase 2 would involve a pilot to incorporate MRT skills education at the NCO level, perhaps in the Basic Leader Course (BLC). This training could incorporate refreshers on individual-level MRT skills learned at BCT and new content on MRT interpersonal skills. For example, MRT interpersonal skills appropriate for junior leaders include *identify character strengths in self and others, character strengths: challenges and leadership, assertive communication*, and *effective praise and active constructive responding*. In addition, leader courses would incorporate refreshers on responsible drinking to reinforce these skills in the leaders themselves and help them (as leaders) inculcate a new culture of responsible drinking in the military. Adding mandatory life skills training at BLC provides an opportunity to reinforce and expand on the training received in BCT, and further allows the Army to build toward a situation where ALL initial entry Soldiers and ALL junior NCO-leaders have a common language and foundation of life skills. Subsequent leader courses would reinforce these skills and include instruction on coaching and mentoring to develop the *connectedness* protective factor. In all cases, the pilot would need to be evaluated and refined before expanding to all leader courses.

Phase 3

If not already addressed through LOE 2 (or other efforts), Phase 3 could involve building a matrix of life skills to be trained and strategically reinforced throughout the first tour of duty or the career continuum. This reinforcement would be facilitated by unit-level MRTs at regular intervals and prior to high-risk times (e.g., holidays, reintegration after deployment). Although this is the nature of MRTs' current work, with this new LOE, they would be doing so with a more prepared audience who already have a baseline familiarity with the skills and competencies.

Evaluation

We recognize that this approach to integrated prevention is expensive (in terms of both time and money), and it is prudent to ensure that the approach yields a significant return on investment. Systematic evaluation and refinement is not only a principle of effective prevention but also an identified as a best practice in program design [32-33]. Therefore, each pilot should include an explicit evaluation plan that defines the desired outcomes from the pilot. These outcomes can be attitudinal (e.g., positive outlook), cognitive (e.g., identifying causes and solutions), or behavioral (e.g., alternating alcoholic drinks with water throughout an event).

The evaluation plan should include pre and post questionnaires assessing participants' level of life skills before and after the training. The same questionnaires should be given to other junior Soldiers and officers not participating in the pilot (i.e., a control group). Further, this pilot group would be queried no fewer than three times in their first tour of duty to determine the extent to which they retain and use the skills from their training. Existing tools (e.g., Global Assessment Tool or GAT/Azimuth Check) or those under development (e.g., the Individual Resilience Assessment (IRA))[8] could be used or adapted for this purpose. This evaluation can illuminate where and when additional specific life skills should be taught or reinforced.

Caveat—the importance of unit leadership

This LOE explicitly develops life skills early in a Soldier's career (and then possibly throughout). However, without supportive leadership that continues to reinforce the value and use of the skills at the unit level, Soldiers will be less likely to retain and use the skills. Unit culture and leadership are likely to have a large (potentially unmeasured) effect on the success of this integrated prevention approach. This is especially true early in the execution of this LOE. However, if the Army conducts Phase 2 of this LOE and executes LOE 2 (discussed next), there will be a larger contingent of Soldiers in those units that have the skills, language, and demonstrated success associated with improved outcomes. Over time, this can build to a culture change in which small units are speaking the same language about resilience and life skills and exhibiting more positive behaviors.

[8] The CSF2 program includes a self-assessment tool that Soldiers take at initial entry, and are expected to take annually. The tool was initially called the Global Assessment Tool (GAT), but has recently been relabeled the Azimuth check. The tool provides feedback to Soldiers on their resilience skills across CSF2 domains. In addition, ARD is currently developing a resilience measure called the IRA.

LOE 2: Merge H2F and CSF2 programs

Concept overview

LOE 2, building on LOE 1, would reinforce and further develop the life skills taught early in Soldiers' careers through merging existing fitness and resilience programs at the installations and units to which Soldiers are assigned. Specifically, *we propose that key aspects of the CSF2 program be integrated into the H2F program*, which is the newer effort that has current implementation momentum. In the proposed LOE—which would retain the H2F name—skills taught in the two programs would be merged and integrated into Soldiers' and leaders' existing education and training as it occurs at key touchpoints along the career continuum. These skills would be taught and reinforced by unit-level H2F strength coaches and by cognitive enhancement specialists working with repurposed MRTs. Connectedness would be ensured through systematic, unit-level activities. These activities, together with H2F and MRT skills, would build skills that serve as protective factors for numerous harmful behaviors.

Currently, H2F and CR2C are executed by separate contractors. ARD program officials report that discussions are underway about integrating the H2F and CSF2 programs. This integration cannot occur, however, until current contracts expire (18 to 24 months from the time of this report). To maximize the likelihood of success, preliminary work on LOE 2 should begin during the current interim period which offers the opportunity to develop goals for the integrated program, along with an implementation plan that could begin to roll out as soon as the new contract period begins.

Rationale

The rationale for merging H2F and CSF2 is that the two programs are already in place with a well-thought-out staffing and support structure. In addition, both programs align well with the principles of effective prevention and address protective factors that help mitigate key risks factor in the Army SEM [21]. The existing H2F domains and CSF2 dimensions overlap to some degree, as do program goals.

Discussions with program staff as well as installation-level H2F and CSF2 personnel indicate that coordination between the two programs is already envisioned, planned, or occurring. These SMEs view the collaboration as a "win-win" endeavor in that H2F has limited personnel to address the mental domain, and the MRTs (uniformed Soldiers) can act as force multipliers and ambassadors for behavioral change in the units. Similarly, because the MRT role is a collateral duty and its implementation is highly dependent on commanders' knowledge and support, it is not being fully and consistently applied. H2F and CSF2 professional resources can serve as a backstop and supporting role for the MRTs as they teach the skills learned in the MRT Level 1 course to Soldiers out in their formations. The MRT training is well regarded by

those who have taken the two-week Level 1 certification course, and MRTs are provided with modules to teach each of the 14 MRT skills. With some repurposing of the MRT training and roles, units can use the program more effectively to help Soldiers develop high-leverage protective factors that mitigate against high-leverage risk factors early in the Soldier's career.

Implementation phases

Phase 1

We recommend a pilot at one or more installations that integrates the H2F and CSF2 domains/dimensions and skills (Appendix C provides an example of what that integration might include). In addition, we recommend creating an installation-level physical space and instituting unit-level changes to teach the skills and develop interpersonal connections. Each of these components is summarized below:

- **Merge domains and skills:** The five H2F readiness domains would be merged with the five CSF2 dimensions, resulting in the four domains described below:
    1. **Physical:** Modify this dimension (currently a feature of both H2F and CSF2) by incorporating the existing H2F sleep and nutritional domains into the physical domain. Responsible drinking would be reinforced as a component of physical fitness.
    2. **Mental:** Incorporate the CSF2 Emotional dimension into the existing H2F mental domain.
    3. **Spiritual:** Retain this domain (currently a feature of both H2F and CSF2).
    4. **Social and Family:** Make this a new H2F domain, merging the CSF2 dimensions of Social and Family, to develop high-leverage interpersonal protective factors and skills that can be applied in relationships with peers, work colleagues, and family members.
- **One-stop shop:** A one-stop *resilience campus* (which might retain the *Performance Center* moniker) for fitness, resilience, and prevention would be created at the installation level, building on existing facilities when possible (e.g., R2 Performance Center, Soldier Support Center). The facility would house the H2F program, the R2 Performance Center, the garrison chaplain, and prevention programs (ASAP, ASPP, FAP, SHARP, chaplain corps, and behavioral health). This campus would ease access to services and potentially reduce the stigma associated with help-seeking as Soldiers would not necessarily know which services anyone else is accessing.
- **Skills training:** At the unit level, H2F performance coaches and nutritionists would help Soldiers develop relevant skills and habits focused on the physical domain,

including nutrition and sleep. H2F cognitive enhancement specialists would work with MRTs and embedded R2 performance experts to ensure that Soldiers develop resilience skills in the mental domain using current or adapted H2F, MRT, and R2 Performance Center curricula and materials. MRTs—who currently participate in a one-time certification training—would be required to get recertified periodically to ensure their skills are current. Existing H2F and CSF2 data tools (e.g., Azimuth Check, IRA) would be used to track progress toward fitness and resilience goals. Although prevention education and supports focused on specific harmful behaviors would continue to be housed at the installation level, CSF2 performance experts and prevention program managers (e.g., SHARP, ASAP, MEO) would offer specific unit-level training requested by commanders or in response to data trends. Goals would be established for these trainings, and metrics identified to gather pre- and post-training data (e.g., participant surveys) to evaluate effectiveness.

- **Connectedness:** The spiritual, social, and family domains would be addressed through systematic, unit-level activities. For example, unit-level orientation for Soldiers might include matching Soldiers to mentors, establishing peer support groups for high-risk populations (e.g., women), and offering family-supportive activities. Surveys could be administered at the orientation session to gauge Soldiers' current connectedness levels and needs, and then re-administered later to measure progress. Chaplains or other entities (e.g., affinity or peer-to-peer groups) would coordinate with unit leaders to create ongoing, alcohol-free bonding and team-building experiences and social gatherings for Soldiers and families.

As with LOE 2, the pilot would be evaluated and LOE 2 refined before scaling up to more installations.

Phase 2

Phase 2 would involve the development of integrated prevention modules tailored for delivery in various settings. These modules would demonstrate how the merged fitness and resilience skills, *now under the H2F program moniker*, align with Army Core Values and help protect against multiple harmful behaviors. The modules would include interactive micro-application exercises for specific harmful behaviors: sexual assault/harassment, harassment and bullying, domestic violence, suicide, and substance misuse. These micro-application exercises would demonstrate how H2F fitness and resilience skills, when applied to specific situations, can help prevent harmful behaviors (e.g., self-regulation to prevent alcohol misuse, empathy and its connection to bystander intervention). Modules would also include strategies for sharing information and resources on specific prevention and response programs. For example, prevention program managers could be present for the training and set up tables with resource information. Soldiers might complete a "scavenger hunt" to find specific information about

each program (e.g., location of each office, helplines). Each module would also include an evaluation plan and related metrics and instruments to evaluate the module's effectiveness.

Phase 3

Phase 3 would pilot the use of the integrated prevention modules developed in Phase 2 in various stages of Soldiers' education and training through their Army careers. For example, a module developed for *BCT* would incorporate practical application exercises in which Soldiers would practice using skills that help prevent the target behaviors (e.g., exercising empathy to support and intervene with peers who are experiencing suicidal ideation). Similarly, modules developed for *basic leader and subsequent training* might provide opportunities for leaders to practice assertive communication to address incidents of bullying and harassment among subordinates. A final example is that an integrated prevention module developed for *installation in-processing* might engage Soldiers and families in practicing communication skills that help prevent interpersonal violence, and incorporate breakout sessions for high-risk groups (i.e., women, sexual minorities, and unmarried Soldiers). Results from evaluation components built into each module would be used to refine the modules before expanding their use to other contexts.

Evaluation

As noted in the preceding descriptions, we recommend piloting each phase of LOE 2, then evaluating and refining the efforts before expanding implementation. The overall evaluation plan for LOE 2 would involve two components, as described below:

- Evaluation of Soldier fitness and resilience:
    - Build on the existing Azimuth Check or IRA to create a tool for assessing the full suite of fitness and resilience skills across the five domains of the reconfigured H2F program.
    - Develop touchpoints for Soldiers to take this self-assessment, to include pre- and post-basic training, upon arrival at an installation or unit and at later appropriate touchpoints, and at key advancement touchpoints.
    - Develop a platform for the Azimuth/IRA data that would not only yield personalized data and related guidance to Soldiers but also allow for aggregating de-identified data at unit and installation levels. This longitudinal data would help evaluate progress toward fitness and resilience goals and inform H2F personnel and unit/installation leaders on areas for improvement. The data would also inform Army policy-makers on needed refinements to the H2F program.

- Evaluation of integrated prevention education: Develop evaluation plans for each integrated prevention module developed in Phase 2 to include the following:
    - Pre- and post-module assessment of participants' understanding of the connection between H2F fitness and resilience skills and the prevention of specific harmful behaviors, as well as changes in related behaviors.
    - Timeline for administering the same assessment at one or two key touchpoints following the training to determine the short- and long-term impact of the training on Soldiers' knowledge and behaviors.
    - Evaluation plan for linking implementation of the modules with data on incidents of harmful behaviors at a sample of Army installations.

LOE 3: Revitalize the CR2C

Concept overview

LOE 3 proposes to systematically assess and refine the CR2C so that it can effectively serve as the coordinating entity for an integrated prevention approach at the installation level. Although CR2Cs are intended to coordinate prevention and response activities within Army commands, the implementation and value of the CR2Cs appear to vary widely across installations. LOE 3 propose to assess and revitalize the CR2C to ensure that it operates as intended. In addition, as the HQDA I-PAG works to develop and implement an integrated approach to prevention, CR2Cs will need to work closely with tactical-level I-PAGs to coordinate activities.

Rationale

The current CR2C grew out of the Community Health Promotion Council (CHPC) concept (codified in AR 600–63) [34]. Regulations require the senior commander at each installation to host a quarterly meeting to include the garrison commander, major tenant commanders, and 18 stakeholders representing public health, medical, spiritual, legal, logistics, and public affairs perspectives. Each meeting includes a focal topic (e.g., awareness campaigns or access to financial services) along with a discussion of trends in harmful and risky behaviors at the installation level. The goal of the CR2C is to take a public health/community approach to prevention and harmful behavior reduction and to identify priorities based on local community needs (surfaced through incident data and needs analysis). In addition to the installation-level CR2Cs, higher-headquarters CR2Cs (e.g., United States Army Forces Command and TRADOC) are to meet quarterly. The policy also specifies that working groups (WGs) be established as needed to address issues that arise across the installation. These WGs are to meet monthly and

develop goals and strategies in the following focus areas: psychological, physical, spiritual, social/environmental, and family. A similar structure, called Ready and Resilient Teams (R2Ts), is supposed to be implemented to perform similar functions at the brigade level.

One noted benefit of the CR2C beyond discussion of issues is the opportunity for networking among the units and the providers, which presupposes that units subordinate to the senior commander participate directly in the CR2C. Several installation program experts and at least one commander noted the value of having a face-with-a-name to address specific issues. Commanders are also more likely to support CR2C goals and initiatives if they are involved in developing them. For this reason, leaders at one installation we visited assign brigade-level commanders to chair the WGs that feed the CR2C. However, current policy does not require these subordinate commanders even to attend the CR2C.

Through our discussions at two installations and with eight additional persons with CR2C experience, we catalog the following challenges with the current CR2C implementation:

- Community Readiness and Resilience Integrators (CR2I), those designated to coordinate the CR2C and associated processes, are often dual-hatted, with many other responsibilities. Consequently, they may have time only to organize and gather the data required to host the meeting while unable to drive change (potentially because of the lack of time, possibly the lack of experience required to do so).
- CR2C meetings become a data/information briefing with little time left to discuss what the data mean and how the data connect with issues at the brigade and battalion level.
- CR2C meetings at some sites are attended by surrogates, which drives other key leaders and decision-makers to send surrogates.
- Brigade commanders do not always get the chance to attend or are not invited.

Implementation phases

Phase 1

Because CR2C implementation reportedly varies widely across installations, we recommend that Phase 1 of this LOE is a systematic inspection of all installation-level CR2Cs to identify strengths, weaknesses, and areas for improvement that will enable the CR2C to coordinate prevention efforts, working closely with the tactical-level I-PAG. This inspection would include a representative sample of subordinate WGs and brigade-level R2Ts, to examine the preparation activities for the CR2C meetings and their possible impact.

The inspection would build on existing processes by which the Department of the Army collects information about CR2Cs, including the CR2C Effectiveness Survey, the CR2C Program Status Report, each installation's annual CR2C charter, each installation's impact tracker, and

technical assistance visits (TAVs). It would also build on a 2016 report on the Fort Stewart, Georgia, CHPC and on a 2017 pilot survey of CHPC working groups at five installations [35-36].

However, Phase 1 for this LOE would require a temporary surge of additional resources and authorities. Site visits are a critical element of this surge. Instead of staggering TAVs with the aim of visiting each installation every three years, additional personnel would need to be tasked to observe at all installations that have CR2Cs in the span of a few months. Also, the primary purpose of these visits would not be to provide external assistance to a structure that reports to the installation's senior commander, but to conduct a Secretary of the Army-mandated inspection in support of a specific Army-level initiative (i.e., to revitalize the CR2C process and coordinate its efforts with that of the I-PAG).

To make coherent comparisons across installations, ARD personnel who inspect staff products and meetings should employ standardized questions based on policy compliance, stakeholder engagement, impact on decisions, prevention best practices, and identification of barriers to success. We provide a sample set of questions in Appendix D. Both the survey and the in-person observations should be designed to not only capture *how* CR2C is implemented differently across installations, but *why* (i.e., local factors that drive the differences). Information-gathering activities should also help shape specific recommendations for how CR2Cs and tactical-level I-PAGs should coordinate efforts.

Phase 2

Phase 2 would generate new policy to overcome barriers identified in Phase 1 and enable the CR2C process to fulfill its potential as a coordinator of comprehensive, community-based prevention. Based on our analysis of SME perspectives from two installations, as well as emerging I-PAG guidance, we posit that the following actions be addressed in new policy:

- Develop specific guidance for coordinating the work of tactical-level I-PAGs and CR2Cs, including how CR2Is are to work with I-PAG personnel.
- Ensure that each CR2C is coordinated by a full-time, dedicated professional with experience in integrated prevention. These CR2Is should be civilian, degreed professionals who gather, analyze, and synthesize the data on the installation and develop potential solutions to drive change.
- Restructure to a bottom-up approach that makes brigade-level CR2Cs (currently identified as R2Ts in the policy) the center of gravity for change so that those closest to the Soldiers identify needs and implement solutions. The brigade-level CR2Cs would meet monthly to discuss issues raised at the battalion and company level. This information would then flow up to the installation-level CR2Cs, who would provide support and develop action plans to address any installation-level issues that arise.

- Require participation by a member of the command triad for all brigade-level subordinate or tenant units.
- Create a mechanism that holds commanders accountable for CR2C implementation and outcomes.
- Charge the I-PAG investigative analyst or prevention specialist with gathering metrics at the CR2C-level to allow for systematic evaluation of the identified goals and initiatives over time (by installation).

Evaluation

The systematic inspection proposed for Phase 1 of LOE 3 would be a first step in evaluating the current functioning of the CR2C. An annual repetition of the modified survey administered in Phase 1 would then capture whether initiatives to revitalize the CR2C have altered stakeholders' perceptions of its effectiveness. In addition, ARD could establish reporting requirements for the CR2Is and employ these reports as measures of CR2C effectiveness. Periodic review by ARD of CR2I-generated action plans and progress briefings, and feedback from ARD to the senior commander at each installation, would hold CR2Is accountable for carrying out CR2C objectives. CR2Is could also collect commander feedback from brigade-level commanders and report the results to ARD annually.

Summary

The integrated prevention approach described in this section includes three lines of effort:

- LOE 1: Builds a baseline of protective factors by incorporating life skills into PME
- LOE 2: Builds robust protective factors in units by integrating the H2F and CSF2 programs
- LOE 3: Revitalizes the CR2C as a data-driven and impactful integration mechanism at installations

Implementation of the three LOEs requires changes in PME, and at the installation and unit levels. In addition, HQDA policy and program changes would be required to provide implementation guidance and support. The recommended integrated prevention approach leverages existing Army efforts and builds on the evidence base established in earlier phases of the research. In the next section, we provide a crosswalk analysis to illustrate alignment of the recommended approach with this evidence base.

Alignment of Integrated Prevention Approach with the Evidence Base

In developing the integrated prevention approach, we deliberately considered shared risk and protective factors (from the Army SEM) and the principles of effective prevention. In this section, we provide a crosswalk to illustrate the alignment of the proposed LOEs to those shared risk and protective factors and principles of effective prevention. We also provide an overview of ways in which the recommended approach aligns with the opportunities and barriers identified through this research and program design best practices. Additional details that further explain the alignment are provided in Appendixes E-H.

Alignment with Army SEM

As noted previously, an earlier phase of this research included development of an Army-specific SEM that identified risk and protective factors associated with two of more of the six target harmful behaviors [3]. We have dubbed any factors associated with three or more of the behaviors as *high-leverage factors* on the rationale that an integrated program that addresses those factors is likely to help prevent multiple harmful behaviors. In this section, we depict ways in which the proposed integrated prevention concept addresses shared risk and protective factors in the Army SEM, and we note (with bolded text) those high-leverage factors. Alignment with risk factors across the LOEs is shown in Table 5 and alignment with protective factors is shown in Table 6.

Table 5. Alignment of integrated prevention concept with risk factors in Army SEM

SEM Level	Risk Factor Label	No. of harmful behaviors associated with factor	LOE 1: Life Skills	LOE 2: H2F/R2	LOE 3: CR2C
Individual	Gender: male	6			
	Poor mental health	6	√	√	
	Marital status: unmarried	6			
	Age: young adult	6	√	√	
	Low education attainment	5			
	Financial stress	5			

	Rank: enlisted	5	√	√	
	Antisocial and aggressive behavior	4	√	√	
	Impulsivity	4	√	√	
	Past exposure to trauma/abuse	4			
	Alcohol misuse	4	√	√	
	Unhealthy or dysfunctional parenting	3			
	Deployment	3			
	Non-heterosexual orientation	3			
	Gender: female	3			
	Lower rank: junior enlisted or junior officer	3			
	Combat exposure	3			
	Hostile gender attitudes and beliefs	3		√	
	Previously committed the harmful behavior	3			
	Low SES	2			
	Race/ethnicity: Non-Hispanic white	2			
	Combat arms occupation	2			
	Sexual identity crisis	2			
	Poor physical health or recent medical issue	2		√	
	Low self-esteem	2		√	

Interpersonal	Association with unhealthy dysfunctional peer groups	5		√	
	Isolation/lack of social support	4		√	
	Close-relationship stressors	4			
Unit	Stigma associated with reporting/seeking help	4		√	√
	Toxic/permissive unit climate	4	√	√	√
	Toxic/ineffective or weak leadership	2		√	
Installation/ local community	Availability of alcohol	3			√
	Access to location or methods	3			√
	Social/community disorganization	2			
	Low community SES	2			
Army	Stigma associated with reporting/seeking help	4			√
	Harmful norms (gender, violence, drinking)	3			√
	Structural barriers to accessing help/resolution	3			√
Society	Weak policy/law	5			√
	Weak economic conditions	4			

Source: CNA.
High-leverage risk factors are bolded.

Table 6. Alignment of integrated prevention concept with protective factors in Army SEM

SEM Level	Protective Factor Label	No. of harmful behaviors associated with factor	LOE 1: Life Skills	LOE 2: H2F/R2	LOE 3: CR2C
Individual	Life skill: decision-making and problem- solving	4	√	√	
	Life skill: empathy	4		√	
	High academic achievement	4			
	Positive affect	2	√	√	
	Marital status: married	2			
	Spirituality/religiosity	2	√	√	
Interpersonal	Social connectedness and support	5	√	√	
	Family cohesion and support	4		√	
	Healthy peer relationships	3	√	√	
Unit	Unit cohesion and connectedness	4		√	
	Positive leadership engagement	3	√	√	√
	Unit-level policy enforcement	3			√
Installation/ local community	Community connectedness and support	2	√	√	√
	Restrict or limit access to instruments of harmful behavior	2			√
Army	Prevention policies	3			√
Society	None identified	0			

Source: CNA.
High-leverage protective factors are bolded.

As the tables reveal, together the LOEs address many of the shared risk and protective factors in the SEM, with a general trend of moving from individual to Army levels as one moves from LOE 1 to LOE 3. That is, the emphasis on skill development in both LOE 1 and 2 helps develop protective factors and mitigate against risk factors at the individual level. LOE 2's focus on unit-level H2F/MRT addresses factors at the interpersonal and unit levels. LOE 3's emphasis on organizational supports addresses factors at the installation and Army levels. Details on how each LOE addresses factors in the Army SEM are provided in Appendix E.

Alignment with effective prevention principles

In addition to designing an integrated prevention concept that addresses key risk and protective factors in the Army SEM, we sought to ensure that the concept would align with the principles of effective prevention [3]. Alignment of each LOE is depicted in Table 7. Brief descriptions of the ways in which the LOEs align with each of the principles are provided in Appendix F. Only one principle of prevention is not addressed by the recommended integrated prevention approach: accompanied by victim-centered response efforts. This principle is focused on secondary prevention and the integrated prevention concept is focused on primary prevention, thus it is not aligned with this principle. The integrated prevention modules proposed in LOE 2 (Phase 2), however, incorporate resources and information on each prevention program, which would include the resources and supports available to victims.

Table 7. Alignment of integrated prevention concept with effective prevention principles

Principle	LOE 1: Life Skills	LOE 2: H2F/R2	LOE 3: CR2C
1. Socioculturally relevant: Programs should address the social and cultural norms of the target audience that increase the risk for or protect against interpersonal violence.			√
2. Theory-driven: Program components should be based on well-established, empirically supported theory regarding the risk and protective factors a program should address, as well as best methods for addressing these factors to achieve the outcomes of interest.	√	√	

Principle	LOE 1: Life Skills	LOE 2: H2F/R2	LOE 3: CR2C
3. Comprehensive: A comprehensive prevention program encompasses multiple kinds of interventions from awareness to skill building to resource support. In addition, interventions should reflect a social-ecological model that offers strategies at multiple levels (individual, peer groups, leaders, families, work environment, community), and include universal programs for everyone as well as targeted programs for those who are at risk or in need.	√	√	√
4. Skills-oriented: Programs develop social and emotional skills that protect against harmful behaviors, including communication, self-efficacy and empowerment, self-regulation, healthy relationships, critical thinking, problem-solving, stress management, coping, empathy, risk avoidance, and conflict resolution.	√	√	
5. Focused on positive relationships: Prevention efforts should incorporate strategies that address positive interpersonal relationships, including mentoring, peer support, and positive, trusting relationships within the program training context.		√	
6. Delivered by well-trained, supported, and committed staff: Program administrators should select facilitators who are committed to the program, provide sufficient training for program delivery, and support staff in delivering the program.	√	√	√
7. Appropriately timed: Programs should be timed to reach participants when they are the most receptive to change or at potentially heightened risk.	√	√	
8. Sufficient dosage and intensity: Programs should be of sufficient depth, length, and frequency to support sustained changes in attitudes and behavior.	√	√	
9. Actively engaging: Prevention education should use varied teaching methods that actively engage participants and incorporate opportunities to practice new skills.	√	√	

Principle	LOE 1: Life Skills	LOE 2: H2F/R2	LOE 3: CR2C
10. Incorporate systematic evaluation and refinement: Systematic evaluation should be built into prevention programs, and the results should be used to refine the programs.	√	√	√
11. Accompanied by victim-centered response efforts: Response efforts should ensure support for victims, including privacy and confidentiality, advocacy and counseling, personal safety, zero tolerance for retaliation, and amnesty for collateral misconduct (e.g., alcohol consumption).			

Source: CNA.

Alignment with opportunities for and barriers to integrated prevention in ongoing Army activities

When designing our recommendations for an integrated prevention concept, we deliberately included elements that incorporate the opportunities for integrated prevention identified in this research. Further, we deliberately sought to address barriers to integrated prevention. Thus, the identified opportunities and barriers are extensively addressed within the proposed integrated prevention concept. Each identified opportunity is incorporated into at least one LOE, and nine of twelve barriers are addressed by at least one LOE. Table 8 depicts the alignment between the opportunities and barriers for each LOE.

Table 8. Alignment of the integrated prevention concept with opportunities and barriers

Category	Element	LOE 1: Life Skills	LOE 2: H2F/R2	LOE 3: CR2C
Opportunities	Shared risk and protective factors can support integrated prevention efforts	√	√	
	Existing resilience and fitness programs provide a strong basis to build from	√	√	√
	Chaplain programs have wide-reaching capabilities			√

Category	Element	LOE 1: Life Skills	LOE 2: H2F/R2	LOE 3: CR2C
	CR2Cs create installation-level integrating bodies			√
	Risk reduction coordinators (RRC) in ASAP already monitor trends across harmful behaviors			√
	Leverage small unit leaders	√		
	Cross-program coordination and referrals are ongoing and can be enhanced		√	√
	Army Core Values highlight positive aspects of Army culture		√	
Barriers	Commander-led approach to prevention creates variability in implementation			
	Perceived competition between integrated prevention and readiness			
	Reactive approach and mentality	√	√	
	Lack of penetration of prevention efforts to ground level	√	√	√
	Lack of relationship support structures		√	
	Drinking culture in the military	√		
	Program overload	√	√	
	Human resource issues			√
	Physical distance between prevention services		√	
	Siloed administrative structures, resources, and mentality			
	Data system issues			√
	Lack of systematic evaluation and program refinement	√		

Source: CNA.

Alignment with program design best practices

Our analysis shows that the integrated prevention concept aligns with nine of the twelve program design elements identified in our literature review, as depicted in Table 9. Notably, our proposed approach does not address issues related to talent management/reward structures and budgeting considerations. It is imperative that the Army consider these factors when designing and implementing an integrated prevention system. A description of each element, along with an explanation of ways in which the proposed approach aligns with those elements, is provided in Appendix E.

Table 9. Alignment of integrated prevention concept with program design elements

Category	Element	LOE 1: Life Skills	LOE 2: H2F/R2	LOE 3: CR2C
Human Resources	Leadership: Central figure or champion			√
	Prevention workforce		√	√
	Flexible talent and reward systems			
Governance	Seamless transition across services and resources		√	√
	Transparent and shared decision-making			√
Infrastructure	Services embedded at local level		√	√
	Integrated budgets			
	Adequate resources			
Design	Continuous evaluation and refinement	√	√	√
	Agile and adaptive design			√
	Integration mapping			√
	Positive framing	√	√	

Source: CNA.

Conclusion

The DOD and the Army are systematically moving toward developing an approach to preventing harmful behaviors that would integrate efforts around key skills and protective factors that help prevent multiple harmful behaviors. Earlier phases of this project supported the Army in moving toward that goal by developing an evidence-based Army SEM that identified risk and protective factors shared across six harmful behaviors, principles of effective prevention associated with these same behaviors, and an analysis of the extent to which existing Army programs address the Army SEM and align with the principles. The current report used those evidence bases to develop an integrated prevention concept that builds on existing Army programs and structures.

The proposed concept emphasizes developing key life skills and protective factors in Soldiers across their careers, including training for leaders not only to enhance the skills for themselves but also to help them reinforce positive behaviors and prevent harmful behaviors in the Soldiers they lead. The concept across the three LOEs addresses 20 of the 40 risk factors and 13 of the 15 protective factors in the Army SEM. It also aligns with 10 of the 11 effective prevention principles (and all of the principles focused on primary prevention), as well as with many elements of effective program design. The recommended approach incorporates all of the identified opportunities for integration and addresses nine of the twelve barriers to integrated prevention that we identified in earlier phases. We proposed a phased approach to operationalizing the concept to make the transition more manageable and create opportunities to pilot aspects of the model before full implementation.

Next steps for the Army to implement the proposed integrated prevention approach include the following:

- Engage the strategic-level (i.e., HQDA) I-PAG in reviewing our proposed concept and ensure that the pending I-PAG guidance positions the I-PAG to conduct the roles outlined in LOE 3.
- Develop a training plan to pilot delivery of some MRT and PFL (or similar) skills in BCT and identify resource constraints and opportunities.
- Develop a detailed plan to pilot integration of H2F and CSF2, including resourcing, governance, and evaluation plans to be ready to execute in less than 18 months (when the current contracts are expiring).
- Develop an implementation plan for executing all three LOEs.

The Army has a unique opportunity in this moment to inculcate primary prevention throughout PME and in the day-to-day lives of Soldiers. Current DOD guidance, the I-PAG rollout, the two highest-value prevention programs (H2F and CSF2) organically working together, the existing installation-based coalition structure (CR2C), and the Army's existing evidence-based life skills training programs all provide opportunities for the Army to make significant strides in integrated primary prevention. If the Army executes this integrated prevention concept, with deliberate emphasis on evaluation from the onset, it will have built an evidence-based primary prevention program focused on long-term skill development, installation-level support, and a climate that reinforces healthy behaviors.

Appendix A: Army SEM of Shared Risk and Protective Factors

Table 10. Risk factors associated with two or more harmful behaviors

SEM Level	Risk Factor Label	Suicide	Substance Misuse	Domestic Violence	Sexual Harassment/ Assault	Discrim.	Extremism	Total
Individual	Gender: male	X	X	P	P	P	X	6
	Poor mental health	X	X	VP	VP	V	X	6
	Marital status: unmarried	X	X	V	V	V	X	6
	Age: young adult	X	X	VP	V	P		5
	Low education attainment	X	X	VP	V	P		5
	Financial stress	X	X	VP		V	X	5
	Rank: enlisted	X	X	VP	VP	P		5
	Antisocial and aggressive behavior	X	X	P	P			4
	Impulsivity	X	X	P	P			4
	Past exposure to trauma/abuse	X	X	VP	VP			4
	Alcohol misuse	X	X	VP	VP			4
	Unhealthy or dysfunctional parenting		X	P	VP			3
	Deployment		X	VP	V			3
	Non-heterosexual orientation	X			V	V		3
	Gender: female			V	V	V		3
	Lower rank: junior enlisted or junior officer	X	X		V			3
	Combat exposure	X	X		V			3

	Hostile gender attitudes and beliefs			P	P	P		3
	Previously committed the harmful behavior	X	X		P			3
	Low SES			VP	V			2
	Race/ethnicity: Non-Hispanic white	X	X					2
	Combat arms occupation	X	X					2
	Sexual identity crisis	X				V		2
	Poor physical health or recent medical issue	X	X					2
	Low self-esteem			P		V		2
Interpersonal	Association with unhealthy dysfunctional peer groups		X	VP	P	P	X	5
	Isolation/lack of social support	X		VP	VP		X	4
	Close-relationship stressors	X	X	P	P			4
Unit	Stigma associated with reporting/seeking help	X	X	VP	VP			4
	Toxic/permissive unit climate	X	X		VP	VP		4
	Toxic/ineffective or weak leadership				VP	VP		2
Installation/ local community	Availability of alcohol		X	VP	VP			3
	Access to location or methods	X	X		VP			3
	Social/community disorganization			VP	VP			2

	Low community SES			VP		VP		2
Army	Stigma associated with reporting/seeking help	X	X	VP	VP			4
	Harmful norms (gender, violence, drinking)		X	VP	VP	VP		4
	Structural barriers to accessing help/resolution	X			VP	VP		3
Society	Weak policy/law	X	X	VP		VP	X	5
	Weak economic conditions	X	X	VP		VP		4

Source: CNA.
Note: "V" indicates a risk factor for victimization, and "P" indicates a risk factor for perpetration of a harmful behavior. Suicide, substance misuse, and extremism do not have Vs or Ps because those harmful behaviors involve a single actor.

Table 11. Protective factors associated with two or more harmful behaviors

SEM Level	Protective Factor Label	Suicide	Substance Misuse	Domestic Violence	Sexual Harassment/Assault	Discrim.	Extremism	Total
Individual	Life skill: decision-making and problem-solving	X	X	P	P			4
	Life skill: empathy			P	P	P	X	4
	High academic achievement		X	P	P		X	4
	Positive affect	X	X					2
	Marital status: married	X	X					2
	Spirituality/religiosity	X	X					2
Interpersonal	Social connectedness and support	X	X	VP	P		X	5
	Family cohesion and support	X	X	VP	VP			4

	Healthy peer relationships		X	P	V		X	4
Unit	Unit cohesion and connectedness	X	X		VP	VP		4
	Positive leadership engagement	X	X		VP	VP		4
	Unit-level policy enforcement		X		VP	VP		3
Installation/ local community	Restrict or limit access to instruments of harmful behavior	X	X	VP				3
	Community connectedness and support	X		VP				2
Army	Prevention policies		X	VP	VP	VP		4
Society	None identified							0

Source: CNA.
Note: "V" indicates a risk factor for victimization, and "P" indicates a risk factor for perpetration of a harmful behavior. Suicide, substance misuse, and extremism do not have Vs or Ps because those harmful behaviors involve a single actor.

Appendix B: Opportunities for and Barriers to Integration

Using insights from prior phases of this research, brainstorming sessions with ARD, and site visits to two Army installations, we identified opportunities for and barriers to integrated primary prevention.

Description of site visits

Our site visits provided a better perspective of barriers to and opportunities for integrated prevention at the ground level. We spent three days each at two large installations (based on the size of their permanent population); one site had a relatively low risk for sexual assault and one had a high risk for sexual assault [37]. At these two sites, we talked with personnel who execute and use the various PORs, as well as those with knowledge of each installation's CR2C. In total, we had approximately one-hour long conversations with 45 program experts and users regarding integrated prevention at the installation level. Table 12 depicts the total number of SMEs we spoke with who represent each role or office. Many of these discussions took place with multiple participants. For example, one ASAP program discussion included seven program representatives.

Table 12. Program experts and users consulted for this phase of research

Office/Role	Total number of persons
Brigade leadership	2
Garrison/Senior Chaplain	2[a]
Division Surgeon	2
Psychological health/Psychiatrist	2[a]
Public Health	1
CR2C	11[ab]
CSF2/R2 Performance Center personnel	4
Holistic Health and Fitness (H2F) personnel	5
Army Substance Abuse Prevention (ASAP) program personnel	10[a]
Army Suicide Prevention Program (ASPP) personnel	3[a]
Sexual Harassment & Assault Response & Prevention (SHARP) personnel	1[a]
Military Equal Opportunity (MEO) personnel	1[a]
Family Advocacy (FAP) personnel	1

Source: CNA.
[a] Indicates at least one discussion includes a reserve component SME.

[b] Includes HQDA and installation-level SMEs including those involved in the program's original design.

Results

The identified opportunities are presented in Table 13, and the barriers are presented in Table 14. A brief explanation follows each table.

Opportunities for integration

Table 13. Opportunities for integration

Opportunity	Description/explanation
Shared risk and protective factors can support integrated prevention efforts	• This research identified shared risk and protective factors that address multiple behaviors across the SEM • Cross-cutting risk and protective factors can be in an integrated prevention strategy
Existing resilience and fitness programs provide a strong basis to build from	• R2 and H2F address many shared protective factors at key touchpoints, and they align with many effective prevention principles • R2 performance experts provide trainings for other PORs including H2F • H2F staff provide training for other PORs and partner with MRTs • Some H2F teams provide office space for R2
Chaplain programs have wide-reaching capabilities	• Chaplains provide the spiritual dimension of H2F and conduct *Build Strong and Ready Teams* retreats • Support other PORs including ASPP • Host events where POR reps meet Soldiers and families • Partner with other programs to add spiritual/mindfulness training to other events
CR2Cs create installation-level integrating bodies	• CR2Cs ensure a broad range of stakeholder collaboration • Leveraging existing CR2Cs takes advantage of ongoing coordinating bodies • Installation-led CR2Cs can incorporate installation-specific strengths to address installation-specific needs • Suicide prevention handbooks describe CR2C as part of a whole-of-person approach • Although CR2Cs hold promise, SMEs indicate that current implementation varies and refinement is needed

Opportunity	Description/explanation
Risk reduction coordinators (RRC) in ASAP already monitor trends across harmful behaviors	• RRC (an ASAP employee) monitors trends across all harmful behaviors ○ Partners with other PORs to develop mitigation plans • *Prime for Life* course could be delivered earlier and made universal
Leverage small unit leaders	• Small unit leaders are closest to the Soldiers and most influential • Increasing connections between small unit leaders and Soldiers can support integrated prevention
Cross-program coordination and referrals are ongoing and can be enhanced	• On some installations R2, ASPP, and others send representatives to ASAP workshops • Cross-program vetting of materials • Cross-program referrals ○ Cross-program triaging to reduce wait times
Army Core Values highlight positive aspects of Army culture	• Strong institutional values identified as a strength

Source: CNA generated.

This research identified several shared risk and protective factors that relate to multiple harmful behaviors. For example, if the Army can teach Soldiers to improve their general decision-making and problem-solving skills, it can reduce the risk of suicide, substance misuse, domestic violence, and sexual harassment/assault. If it can reduce financial stress by teaching better financial management skills, it can reduce the risk of suicide, substance misuse, domestic violence, discrimination, and extremism. Therefore, an integrated approach to prevention can make efficient use of time and resources to reduce harmful behaviors across the board by addressing mental health conditions, antisocial behavior, impulsivity, financial stress, and alcohol misuse, and by increasing problem-solving skills and empathy. The Army can target associated skill trainings at career and personal milestones to package them in a manner particularly relevant and salient to that milestone [21].

For junior Soldiers, career milestones where they are likely to benefit from skills-based prevention training include prior to accession, during entry-level training, and upon arrival at their first permanent duty station. Other logical milestones at which they have a decision to make or are at greater risk for harmful behaviors (because some protective factors are disrupted) include selecting preferences for their next assignment, after arriving at their new unit, when deciding whether to reenlist, pre-and-post deployment, and pre-and-post recreation. The Army also has an opportunity to provide additional skills training to Soldiers

when they advance to a new grade or participate in leadership training required for their career advancement. Personal milestones that will require new skills include marriage, the birth or adoption of a child, divorce or death of a loved one, purchasing a home, diagnosis with a medical condition or disability, or facing disciplinary or legal action.

H2F and R2 currently address some of these high-leverage factors. Both programs teach empathy and problem-solving [19, 38-40]. H2F also addresses poor mental health. Neither explicitly addresses antisocial and aggressive behavior, impulsivity, financial stress, or alcohol misuse, but other PORs (FAP, SHARP, Building Strong and Ready Teams, FRP, and ASAP) do. H2F and R2 also build other protective factors including positive affect, spirituality, social connectedness and support, and unit cohesion. Encouragingly, at the installation level, H2F and R2 are finding ways to integrate with each other and with other programs. For example, not only do R2 performance experts support cognitive enhancement training called for by H2F, they also have offices in H2F spaces at Fort Bragg. These performance experts also provide training for other programs such as ASPP and SHARP. Within the brigade, the full-time professionals of H2F extend their reach by supporting the collateral duty MRTs.

Chaplains have a formal role in several PORs, including H2F. The Building Strong and Ready Teams program that is administered by chaplains contributes to several identified protective factors including problem-solving, empathy, positive affect, social connectedness, family cohesion, and healthy peer relationships, and aligns with several principles of effective prevention. Chaplains have also found innovative ways to integrate with other programs, such as hosting a barbecue where other prevention programs engage with Soldiers and adding a spiritual/mindfulness element at the end of a physical challenge. This combined training contributes to the effective prevention principles of "actively engaging" and "comprehensive" and was so successful that participants reported squad leaders began replicating it on their own without external support.

Another approach to the CR2C is the 1st Armored Division/Fort Bliss "Operation Ironclad," which has a full-time planning staff, convenes a board twice per month, and includes six working groups that are each chaired by a colonel-level commanding officer and bring together SMEs from across multiple prevention programs. This approach educates commanders and ensures their buy-in, and also develops cross-program campaigns and enables resource allocation decisions. Command buy-in is essential to solve the problem of inconsistent dosage and intensity across units that we note above.

CR2Cs provide a promising opportunity for integrated prevention because they already bring together key stakeholders on installations. These stakeholders are aware of installation-specific needs and strengths and can invest in solutions that improve their community. Although there is more than one approach for a CR2C to generate value, the *Senior Commander's Guide to Suicide Prevention* and the related brigade and battalion commander's

handbook make clear that it is to help orchestrate a whole-of-person approach to reduce risk of harmful behaviors such as suicide [41]. To be more than a data-gathering exercise, it needs to be chaired by someone of appropriate influence and strongly supported by the commanding general.

Also at the installation level, the RRC (an ASAP employee) has a specific role in program integration. This person monitors trends across all harmful behaviors, which could contribute to a systematic evaluation of program effectiveness that is not yet fully developed. If a unit has a concerning trend, the RRC can partner with appropriate SMEs across the other prevention programs to develop remediation plans to present to the unit commander. Because alcohol misuse is a high-leverage point for prevention, the *Prime for Life* course offered by ASAP may be a useful tool to reduce risks across the board if it were more broadly implemented. SMEs report that when Soldiers receive this training *after* an alcohol-related incident, they often wish they had received it earlier. The Army may be able to adjust its cultural relationship with alcohol by including *Prime for Life* in entry-level training or by including a discussion of how to shape a unit's relationship with alcohol in professional military education for field grade officers.

Integration of prevention activities needs to occur not only at the installation and brigade levels, but in small units as well. Squad leaders know their Soldiers better than others in leadership positions and are in the best position to influence them; if they are educated about available resources, they can help direct individuals and teams to the help they need.

With the right processes and relationships in place to enable integration, programs can share useful information and complement one another in useful ways. One program can provide a venue for others, such as when eight programs send representatives to "Stay Ready" workshops sponsored by ASAP. They can review and propose edits to another prevention program's messaging or training materials before these materials are released. And they can make referrals or shorten wait times: FAP refers Soldiers to ASAP if they find an underlying drinking problem, ASAP refers Soldiers to stress management training provided by FAP, chaplains refer Soldiers to behavioral health officers, and SHARP helps sexual assault victims get faster treatment from behavioral health rather than waiting for months.

Finally, we note that the Army's Core Values of loyalty, duty, respect, selfless service, honor, integrity, and personal courage all support resilience. Specific prevention programs are building on the positive aspects already embedded in Army culture to enhance the Soldier experience and the Army's performance by promoting healthy behaviors.

Barriers to integration

Table 14. Barriers to integration

Barrier	Description/explanation
Commander-led approach to prevention creates variability in implementation	• Commanders have discretion to prioritize efforts and are not held accountable for program quality • Commanders lack expertise and comfort level with principles of prevention and tools to effect behavioral change
Perceived competition between integrated prevention and readiness	• There is no common understanding of the link between integrated prevention and readiness • OPTEMPO forces urgent reporting requirements • Commanders focus on what they are held accountable for
Reactive approach and mentality	• Unit leaders become interested in prevention *after* something goes wrong • "Fire and forget" culture means they do not sustain prevention efforts
Lack of penetration of efforts to ground level	• Small unit leaders are unaware of prevention programs and do not always use resources available within the brigade and battalion • Platoon commanders and squad leaders make decisions counter to general officers' intent (e.g., having Soldiers wait around all day for a task and then work into the night to finish the task)
Lack of relationship support structures	• Consistent reinforcement of positive behaviors between prevention activities and events is lacking • Bonding experiences that do not involve alcohol are lacking
Drinking culture in military	• Alcohol is frequently considered part of Army bonding experience • Behavioral health implications of alcohol misuse are rarely discussed
Program overload	• There are hundreds of prevention programs in the Army • Commanders may not be aware of all programs and available resources • Programs compete for time and resources

Barrier	Description/explanation
Human resources issues	• Funding and hiring delays leave positions gapped, leaving available personnel often dual-hatted • Personnel turnover sets back integration efforts • The behavioral health workforce is undermanned • Several prevention roles are a collateral duty
Physical distance between prevention services	• Services are geographically spread across large installations
Siloed administrative structures, resources, and mentality	• Separate reporting structures are managed by different commands ○ Prevents pooling or reallocation of funding • Contract restrictions hinder some providers • Programs are concerned with self-preservation; they fear integration could lead to eliminating programs
Data system issues	• Data are scattered across information systems with different formats • Software tools are inadequate to collect and fuse data • Confidentiality issues affect data sharing • Dosage and benefits cannot be measured

Lack of systematic evaluation and program refinement	• The lack of a comprehensive evaluation and accountability strategy results in
	  ○ No systematic feedback loop to inform decisions
	  ○ No system to identify best practices to scale up
	  ○ No decision framework for what to cut

Source: CNA generated.

Prevention of harmful behaviors, as with anything else affecting the performance of a unit and the Soldiers within it, is ultimately the responsibility of the unit commander. It is one of many priorities, and commanders vary in their understanding of the connection between prevention and their overall mission. Their expertise in and comfort level with prevention also vary, as does their understanding of behavioral change in general. Furthermore, commanders are seldom held accountable even for elements of prevention training that are theoretically mandatory. Because of commanders' discretion in how to prioritize and implement prevention programs, their lack of expertise, and their lack of accountability, the degree to which units implement prevention programs varies considerably. We noted this in our previous report, in which we evaluated alignment between prevention programs and principles of effective prevention. We found most programs "unclear" with respect to the principle of sufficient

dosage and intensity because units have broad discretion to determine the degree to which programs are implemented.

The concerns associated with reliance on commanders are exacerbated by a common perception that prevention is not a high institutional priority of the Army. To be clear, this is *not* because the Department of the Army does not care about its people. However, Army leaders lack a common operating picture of the benefits of holistic, integrated prevention and how they relate to mission accomplishment. Furthermore, the Army faces structural and operational tempo constraints beyond its control that make prevention more difficult. When commanders cannot find time for everything expected of them, they will put off requirements that they perceive to be less urgent and for which they are not directly held accountable. Because of these time constraints, leaders may not only fail to schedule mandatory prevention-related trainings and events within the unit but may also push back against individual Soldiers accessing programs that take them away from their duties in the unit. Program officials report that this pushback is especially likely when accessing prevention programs involves travel time.

Institutional priorities and commanders' understanding of prevention both contribute to a related issue, which is a reactive approach to harmful behaviors. Behavioral health within a unit is more urgent and more scrutinized by external forces *after* a harmful event such as a suicide, a sexual assault, or police notification of domestic violence. Unfortunately, after the immediate response to the event, unit leaders may see the issue as resolved (for now) and move on, part of what experts refer to as a "fire and forget" culture. As a result, commanders are focused on responding to events rather than preventing them and may not consider the importance of building organizational or individual skills to protect Soldiers and units against harm. Furthermore, small unit leaders may not understand how their actions can increase risk for Soldiers and units. For example, SMEs reported incidents of needlessly degrading Soldiers' readiness and morale, such as making them wait all day for a truck and then work all evening unloading it.

Even when general officers and brigade commanders try to elevate the priority of prevention and resilience, small unit leaders may not fully understand why. They often lack awareness of programs and resources available to help their Soldiers; this lack of knowledge may even extend to resources available within the brigade or battalion but not organic to the company.

Gaps in holistic prevention extend from the small unit level to interpersonal relationships. Social connectedness is a protective factor for several harmful behaviors, and fostering positive relationships is a principle of effective prevention. Although the Army promotes a "battle buddy" program for positive reinforcement and detection of warning signs as well as a sponsorship program to facilitate transition to a new installation, SMEs report that these programs are not fully implemented. They also report that Soldiers, like Americans in general,

tend to have less face-to-face interaction with other humans today than they did in previous generations. This makes it more difficult to reinforce positive interpersonal interactions between training events.

Furthermore, the social interaction among Soldiers that does occur often involves alcohol. Although alcohol is an identified risk factor for suicide, sexual assault, and domestic violence, several prevention program SMEs indicate that alcohol plays a central role in Army culture. A 2021 RAND report confirmed the assertions made by program SMEs and described in two articles published by Military.com and Renewal Lodge that the US military, including the Army, has unhealthy levels of alcohol use that are higher than the levels among the US civilian population [42-44]. Alcohol's frequent role in bonding experiences suggests a need for the Army to introduce and promote alternative bonding activities that do not involve alcohol.

Aside from the difficulties of the units and individual Soldiers participating in prevention programs, there are also difficulties within the programs themselves. For one, prevention is spread across many programs; the sheer number of programs and the variety of associated terminology are confusing. In this study, we focus on eight PORs in addition to MEO, but the CR2C at Fort Bliss reports that they coordinate 17 PORs and are aware of 120 PORs within the Department of the Army that are related to prevention. It is difficult for commanders (to say nothing of squad leaders) to maintain awareness of all these programs, and even with perfect awareness, the programs would compete with one another for time and resources.

Programs also have staffing difficulties. Funding constraints and slow government hiring processes leave positions unfilled, and when replacements *are* hired, their lack of experience with the other programs sets back integration efforts. The personalities and skill levels of program managers vary across installations and units, resulting in inconsistent quality. Multiple stakeholders expressed concern that the behavioral health workforce is particularly undermanned, and this problem is exacerbated by poor understanding within units of what does and does not require a referral to behavioral health. This lack of understanding creates an overreliance on behavioral health when behavioral health services are not necessary, resulting in long wait times to receive services. Finally, several prevention programs rely on collateral duty assignments rather than full-time professionals to execute at least some of their functions. All of these challenges undermine effective prevention, one principle of which is that it be delivered by qualified, committed, and supported staff [21].

Physical distances and administrative silos separate prevention programs from one another and from the Soldiers they serve. Even with a car, distances across large bases such as Fort Bliss present a non-trivial barrier to access, and many junior Soldiers do not have their own cars. In addition, accessing multiple programs can involve traveling across different areas of the base. Procedural barriers between programs include different reporting chains and funding sources. They also include contract restrictions on which tasks contractors can

perform and which curriculums they can use. Programs may even hesitate to coordinate with other programs because of concerns about self-preservation.

One consequence of these administrative silos that receives particular attention is segregation of data. Prevention data are stored in different formats on different information systems, with inadequate software tools to fuse them. Confidentiality policies also impede sharing data across programs. As a result, program administrators or commanders have difficulty determining who has received prevention training (and in what dosage) or tying resilience outcomes to dosage to assess program benefit.

Even if they had perfect data fusion available, prevention programs lack a systematic framework to measure results and inform resource decisions, as noted above and in our previous report. Leaders and providers across the Army experiment with different interventions but have no system to identify which practices should be scaled up and resourced, and which practices (or entire programs) should be cut to reallocate time and money more efficiently.

Appendix C: Skills for Phase 1 of Integrated Prevention Approach

Introduction

This appendix provides a preliminary matrix of skills the Army would explore in Phase 1 of the integrated prevention concept. The matrix identifies overlap in the skills taught in MRT and H2F to help ARD build an integrated program organized according to the four reconfigured H2F domains proposed in LOE 2: (1) physical, (2) mental, (3) spiritual, and (4) social and family. We then provide guidance on identifying gaps between the integrated skills and the risk and protective factors that can be addressed through training and education from our social-ecological model (SEM). Enumerating the life skills to be emphasized in Army training efforts is a first step in incorporating life skills into professional military education (PME) (LOE 1) and integrating the H2F and MRT programs to develop individual, interpersonal, and unit-level protective factors for preventing harmful behaviors (LOE 2). Phase 1 of LOE 1 and LOE 2 would involve, in part, developing a Basic Combat Training (BCT) life skills pilot program, as well as unit-level life skills training using aspects of established programs (e.g., MRT and H2F). The skills matrix developed here would help the Army understand which life skills should be the focus of these training programs.

Defining *skill*

When defining *skill*, it is useful to distinguish between skills, knowledge, and abilities, as is frequently done when describing behavior in an occupational context. A *skill* can be defined as a proficiency learned or acquired through training or practice. *Knowledge* can be defined as the body of information required to perform a task. An *ability* can be defined as the capacity to apply knowledge and skills to complete a task, which is often considered to be an innate characteristic of an individual [22]. When we discuss life skills, then, we mean proficiencies related to physical, mental, spiritual, and social and family health that can be acquired through training or practice.

Approach

To identify the life skills that should be the focus of Phase 1 BCT and unit-level life skills training programs, each of the three team members independently reviewed MRT and H2F policy and

guidance documents, identifying specific skills relevant to the four *reconfigured H2F*[9] domains (LOE 2). In addition to organizing the skills as described in each program, the team took an additional step to integrate similar skills under a broader skill description (see the integrated skills column in Table 15). Team members iterated this process until they reached consensus on the skills crosswalk between MRT and H2F and the integrated skills label.

Skills matrix

The final skills matrix, shown in Table 15, lists the life skills taught in the MRT and H2F programs, respectively. The integrated skills column is our suggested consolidation of the life skills taught in each program. The intent is to reduce redundancy while retaining all skills currently covered by the two programs. We suggest new labels for some of the skills in an attempt to capture the essence of the skills as described in both programs.

Table 15. Preliminary integration of MRT and H2F programs into a skills matrix

Domain	MRT skills	H2F skills	Integrated skills
Physical	Energy management	Physical fitness	Physical fitness
		Healthy eating habits	Healthy eating habits
		Healthy sleep habits	Healthy sleep habits
Mental	Hunt the good stuff	Productive self-talk including cognitive reframing	Positive reframing
	Put it in perspective	Stress control	Stress management
	Problem-solving	Problem-solving and decision-making	Decision-making and problem-solving
	Goal setting	Goal setting (SMART)	Goal setting
	ATC (understanding reactions) Avoid thinking traps Mental games Real-time resilience Detect icebergs	Activation	Self-regulation (emotional and behavioral)
	Energy management	Attention control/performance imagery	Focus/attention control
Spiritual		Empathy	Empathy
	Detect icebergs	Spiritual self-assessment	Spiritual/core values self-assessment
		Spiritual justification self-talk	Core values affirmation

[9] The reconfigured H2F domains represent a merging of the MRT and H2F domains but retain the H2F moniker.

Domain	MRT skills	H2F skills	Integrated skills
		Supporting unit members' spiritual fitness	Supporting peers' development of core values
Social and Family		Empathy	Empathy
	Effective praise and active constructive responding	Connection and engagement	Effective praise and active constructive responding
	Assertive communication	Relationships and communication	Respectful communication
	Character strengths: Challenges and leadership/Identify character strengths in self and others		Identify character strengths in self and others
		Social acuity: Social cohesiveness, task cohesiveness, and Army identification and commitment	Social acuity

Source: CNA.

In identifying skills for the physical domain, we list only three broad skills emphasized in the H2F program: physical fitness, healthy eating habits, and healthy sleep habits. H2F policy guidance includes a more fine-grained approach to developing these skills, including many physical skills that Soldiers will learn as part of H2F strength training. ARD may wish to define these skills in more detail, in consultation with H2F program experts.

In identifying skills for the mental domain, we found significant overlap between the MRT and H2F programs. When the two programs used identical labels (e.g., *goal-setting*), we show those same labels in the integrated skills column in Table 15. For overlapping skills that are labeled differently in the two programs, we suggest new labels; for example, *positive reframing* to capture the MRT skill of *hunt the good stuff* and the corresponding H2F skill of *productive self-talk*. We also determined that several MRT skills and one H2F skill capture the broader life skill of *self-regulation (emotional and behavioral).*

Skills in the spiritual domain were more ambiguous than those in the other domains. *Spirituality* itself is a protective factor and therefore an important domain, but without a defined objective (e.g., religious affiliation, moral or ethical core, strong sense of purpose or self-identity), the specific life skills were difficult to identify, and MRT and H2F policy and guidance documents did not identify specific skills (according to our definition) in this domain. The matrix displays our best attempt to capture key spirituality aspects of both programs. For

instance, the H2F program references spiritual self-assessments, spiritual justification self-talk, and support of peers' spiritual fitness. The MRT *detect icebergs* skill speaks to identifying core belief and values. Both programs directly address *empathy*, which is a high-leverage protective factor in this domain. ARD might consider developing explicit objectives for this domain using this matrix as a starting point to identifying skills that contribute to those objectives.

In identifying skills, we initially separated the social and family domain into two domains, as is done in the Comprehensive Soldier and Family Fitness (CSF2) program (of which the MRT program is a part). However, a closer look at the relevant life skills indicated that the skills taught in each domain would be identical. Therefore, we collapsed the two domains for the purposes of the skills matrix. As the Army implements LOE 1 and LOE 2, some attention should be given to how to ensure that Soldiers learn to apply the identified skills in their social interactions with work colleagues, peers, and family members.

Identifying skill gaps

The skills matrix identifies what is currently being taught in the H2F and MRT programs but should not be construed as a complete list of life skills to be taught at BCT or in the units. To continue developing skills to be included in professional military education (PME), we suggest identifying gaps between the current skills taught and the crosscutting risk and protective factors that can be addressed through training and education. The 23 crosscutting risk and protective factors that can be addressed through training and education are shown in Table 16.

Table 16. Cross-cutting risk and protective factors that can be addressed through training and education

Risk Factors	Protective Factors
Antisocial and aggressive behavior	Life skill: decision-making and problem-solving
Impulsivity	Life skill: empathy
Financial stress	Positive affect
Alcohol misuse	Spirituality/religiosity
Hostile gender attitudes and beliefs	Social connectedness and support
Association with unhealthy dysfunctional peer groups	Family cohesion and support
Isolation/lack of social support	Healthy peer relationships
Close-relationship stressors	Unit cohesion and connectedness
Stigma associated with reporting/seeking help	Positive leadership engagement
Toxic/permissive unit climate	Community connectedness and support

Risk Factors	Protective Factors
Stigma associated with reporting/seeking help	
Harmful norms (gender, violence, drinking)	

Source: CNA.

The current skills taught align with many of these factors. For example, *respectful communication* can protect against *antisocial and aggressive behavior* and foster *healthy peer relationships.* Aligning the current skill with the appropriate risk and protective will reveal which factors are not yet addressed and identify which skills need to be developed in the new integrated approach.

Implications

The skills matrix presented here identifies key life skills that might be incorporated into Soldiers' initial BCT and then reinforced throughout their Army careers. The matrix shows how the skills currently taught in MRT and H2F correspond to one another. The integrated skills column is a first attempt at streamlining those skills to avoid duplication. In some cases, we have suggested a different label for the skill to better capture the essence of related skills that are taught in both programs, and to ensure that the label is an actual *skill* that Soldiers can learn through repetition and practice.

We offer the matrix as a starting point for the Army in implementing LOE 1 and LOE 2 with a broad set of skills to reinforce integrated prevention. We recommend that ARD enlist appropriate program and subject matter experts to review and refine the matrix, adding any missing skills, relabeling skills as needed, and crafting definitions of each skill—drawing on current definitions (when available) in the MRT skills and H2F policy document.

Once the full set of skills is identified and defined, the next step is to develop a plan for incorporating the skills into BCT, leveraging existing modules as appropriate. For example, BCT training on Army Core Values may align well with teaching specific skills that operationalize those values. The plan may also include developing units and activities that cannot be integrated into existing lessons and recommending when and how those units will be incorporated into BCT. The plan should also include identifying installations where the new BCT approach will be piloted, including an evaluation plan to measure outcomes and make needed refinements before expanding implementation.

Appendix D: CR2C Inspection Surveys and Checklists

This appendix provides sample questions to be used to conduct Command Ready and Resilient Council (CR2C) inspections. To make coherent comparisons across installations, ARD personnel who inspect staff products and meetings should employ standardized questions based on policy compliance, stakeholder engagement, impact on decisions, prevention best practices, and identification of barriers to success. Both the survey as well as in-person observations should be designed to not only capture *how* CR2C is implemented differently across installations but also *why* (e.g., local factors that drive the differences). Information-gathering activities should also help shape specific recommendations for how CR2Cs and tactical-level I-PAGs should coordinate efforts. This level of inspection is necessary for the Army to gather a detailed understanding of the current state of CR2Cs across installations and then employ those findings to revitalize the CR2C.

The first section below includes overall evaluation questions for the site visit team to address in their installation report. In the second section, we detail survey questions that could be used during, or prior to, the site visits. Ideally, survey responses would be collected prior to the site visit to inform specific observations and questions at the installation. Next, we detail questions to be asked and items to observe regarding CR2Cs, working groups (WG), and ready and resilient teams (R2Ts). Following those questions, we provide recommended questions to ask stakeholders who work or provide services at the installation but are not directly involved with the CR2C, its subordinate WGs, or R2Ts. Finally, we provide compliance questions that can be gathered unobtrusively through CR2C documents at the installation.

The overall evaluation questions for the site visit team are comprehensive and broad. They will be addressed in the summary report on the installation and will be informed by questions for CR2C entities, observations, and document review. The questions are as follows:

- How effectively does this installation's CR2C implement its processes?
- How effectively do the subordinate WGs implement their processes?
- How effectively do the brigade-level R2Ts implement their processes?
- How can this installation's CR2C process, including subordinate WGs and R2Ts, be improved?
- What short-term outcomes are achieved by this installation's CR2C?

- What CR2C initiatives do the CR2C members, WG members, R2T members, and partners outside the CR2C think are affecting health behaviors, health status, or harmful behaviors? Why?
- To what extent are the tactical, medical, and garrison assets at this installation integrated through the work of the CR2C?
- Are the CR2C's initiatives socio-culturally relevant (do they address the cultural and social norms of the target audience)?
- Are the CR2C's initiatives based on well-established theory about causes of behavior and related risk and protective factors?
- Do the CR2C's initiatives contribute to more comprehensive prevention programs at this base? That is, do they increase the extent to which prevention programs (1) encompass multiple elements from awareness to skill building to resource support, and (2) simultaneously address individual, interpersonal, work environment, community, and society factors?
- Do the CR2C's initiatives contribute to developing social and emotional skills?
- Do the CR2C's initiatives contribute to safe, trusting relationships that can reinforce skills learned?
- Does the CR2C help ensure that those providing prevention services are well trained and qualified?
- Are CR2C initiatives timed to reach participants as early in their career as possible, or just at key transition points or during heightened risk?
- Do the CR2C's initiatives contribute to prevention programs using a wider variety of teaching methods or becoming more actively engaging?
- Do the CR2C's initiatives incorporate systematic evaluation and refinement?
- Do the CR2C's initiatives contribute incorporate support to victims?

Survey questions for CR2C, WG, and R2T participants:

1. Check each of the following boxes that apply to you: ☐CR2C member ☐WG member ☐ Brigade R2T member
2. Is the CR2C chaired and attended by the senior commander at least quarterly?
3. Has the senior commander identified priorities for the CR2C to address in the last year?
4. Does the installation strategic plan or campaign plan incorporate CR2C requirements?

5. Does the installation have a CR2I designated as special staff to the senior commander on the organizational structure?
6. Does the installation have at least five priority areas identified based on senior commander input and data analysis to support the CR2C objectives**?**
7. Does each priority area have a working group and action plan to address the issue?
8. Does each WG report the status of its metrics for the identified priorities at least quarterly to the CR2C?
9. Does the CR2C membership include medical, tactical, community, and local representatives?
10. Does the installation have a completed Community Resource Guide, and is it updated annually?
11. Are recommendations from the WG to the CR2C based on analyses? Please describe.
12. Has the installation implemented initiatives related to stress management, combat stress control, suicide prevention, responsible sexual behavior, and the Army Substance Abuse Program?
13. Does the installation have a functioning Suicide Prevention Task Force (it can be part of the Behavioral Health Working Group) that meets at least quarterly and reports to the CR2C?
14. Is a WG assigned to sexual assault?
15. Does each WG (or your assigned WG) assess existing programs and interventions?
16. Does each WG (or your assigned WG) make recommendations to the CR2C?
17. Does each WG (or your assigned WG) evaluate implemented recommendations?
18. Have commanders provided input on the concerns of Soldiers and their families?
19. Are brigade commanders/tenant unit commanders involved in the CR2C?
20. Do brigade-equivalent units (or your brigade-equivalent unit) have brigade R2Ts?
21. Do brigades/tenant units (or your brigade/tenant unit) report their high-risk and resiliency concerns to the CR2C?
22. Does the CR2C respond to issues identified by the Army family action plan?
23. Is the mission of each meeting clearly stated?
24. Does the CR2C identify gaps in existing resources for needs and risks?
25. Does the CR2C include a marketing plan for priority action plans?
26. Does the CR2C share best practices?
27. How can the CR2C meetings, WG meeting, or R2T meetings be improved to help you with your mission of taking care of the soldiers and their families?

28. Does the CR2C identify capabilities to match against identified gaps and support plans of action?
29. Are there any Integrated Prevention Advisory Group (I-PAG) personnel at this base?
30. [If yes to 29] How do they contribute to your program or unit?
31. [If yes to 29] How do you communicate with them or provide information to them?
32. [If yes to 29] What role do they play in the CR2C or its subordinate WGs?
33. What barriers are limiting the CR2C's ability to develop and execute action plans?
34. What barriers are limiting the CR2C's ability to drive concrete prioritization and re-allocation decisions?
35. What barriers are limiting the CR2C's ability to measure and assess outputs and outcomes of initiatives?

Questions for the site visit team to answer based on observation of a CR2C meeting, associated meeting products, and focus group input (generated from a focus group of CR2C members):

1. What are the CR2C's current priority areas or focus?
2. What is the CR2C working on that is impactful? Why is this work impactful? What is the CR2C working on that is not impactful? Why is this work not impactful?
3. What characteristics make a CR2C effective? Which of those are in place here?
4. What role do WGs play in helping this CR2C achieve its intended outcomes?
5. How could WG relationships with the CR2C be improved, if at all?
6. What role do R2Ts play in helping this CR2C achieve its intended outcomes?
7. How could R2T relationships with the CR2C be improved, if at all?
8. What role do CR2C members play in helping the CR2C achieve its intended outcomes?
9. What are the CR2C's main achievements in the past 12 months?
10. How can the CR2C process at this installation be improved?
11. Is there a formal charter for the CR2C stating the organization and membership, mission, scope and objective, meeting schedule, standard products and/or services, metrics, assessment, outcome reporting protocols, and marketing/outreach plan?
12. Do programs directed by the CR2C include public health awareness, BH interventions, physical programs, spiritual programs, and environmental and social programs?
13. Do programs directed by the CR2C directly affect Soldiers, Army civilians, family members, and retirees?
14. Are there means for the commanders to monitor program goals and objectives?
15. Do CR2C members analyze data resulting from program assessments or evaluations?

16. Do each of the following attend the CR2C?
    a. Senior commander
    b. Garrison commander
    c. Senior commander's command sergeant major
    d. CR2I
    e. SPPM
    f. Major tenant commanders
    g. Garrison command sergeant major
    h. Director, Human Resources Policy Directorate
    i. Provost marshal
    j. FAP manager
    k. Medical treatment facility commander
    l. Director of logistics
    m. Director for plans, training, and mobilization
    n. Dental activity commander or director of dental services
    o. R2 program manager
    p. Senior chaplain or delegated representative
    q. Public affairs officer
    r. Risk Reduction Program coordinator
    s. Alcohol drug control officer
    t. SARC
    u. SJA
17. How often does the CR2C convene?
18. Does APHC's Clinical Public Health and Epidemiology Directorate or another outside entity provide the CR2C with program evaluation consultation?
19. How many commanders of brigade-equivalent units are at the installation, and how many of them regularly attend the CR2C?
20. Does the CR2C set criteria and examine the data when it develops a list of priority problems?
21. Does the CR2C assess the community's capacity to address the problems, and does it identify programs and policies already addressing the problems?
22. Does the CR2C drive decisions by the senior commander to reallocate funds or labor to a particular program to meet a specific objective?

23. Does the CR2C drive decisions by the senior commander or other tenant commanders to direct their subordinate commands to modify their training or unit policies?
24. Does the CR2C drive requests by the senior commander or commanding general to off-base stakeholders (e.g., police, school district, property managers, medical providers) to support a prevention initiative?
25. How does the on-base population differ from other Army bases, and how does the population affect requirements and the CR2C's approach?
26. How do the available programs at this base differ from other Army bases, and how do the programs affect requirements and the CR2C's approach?
27. How does the off-base community and setting differ from other Army bases, and how do they affect requirements and the CR2C's approach?
28. For processes or structures found to differ from the technical guide or from those of other bases: Is there something we should know about this base that led to that adaptation?

Questions for the site visit team to answer based on observation of WG meetings, associated meeting products, and focus group input (generated from a focus group of WG members):

1. What are the WG's current objectives? What is the WG currently doing to meet those objectives?
2. What is the WG working on that is impactful? Why is this work impactful? What is the WG working on that is not impactful? Why is this work not impactful?
3. What role do WGs play in helping the CR2C achieve its intended outcomes?
4. How could WG relationships with the CR2C be improved, if at all?
5. What role do WG members play in helping the WG achieve its intended outcomes?
6. What are the WG's main achievements within the past 12 months?
7. How can the WG's efforts be improved?
8. Do WG members reach a consensus before a decision is finalized?
9. Does key leadership in the CR2C support the mission of this WG?
10. Who represents this WG in the CR2C meetings, and why?
11. How does the WG chair communicate the WG's activities to the CR2C?
12. Has the WG identified and published a set of priorities for the installation?
13. Are the WG's goals and objectives (a) clearly defined, (b) agreed upon by WG members, (c) realistically attainable, and (d) clearly stated in the WG's action plan?
14. Is the WG on track to complete the activities outlined in its action plan?

15. Are the initiatives and strategies proposed in the WG's action plan (a) evidence based and (b) consistent with the WG's goals and objectives?
16. Are the WG's initiatives documented in the CR2C Impact Tracker?
17. Which of the following steps do recent and ongoing action plans at this installation follow:
    a. Create a work plan and timeline to develop and release the action plan
    b. Coordinate expertise and staff support
    c. Assign tasks to teams and individuals through an Operations Order (OPORD)
    d. Establish and implement processes for ongoing input
    e. Monitor the plan and outcomes through the impact tracker
    f. Market the development process (via a communication plan)
    g. Plan periodic reviews
18. How often does each WG meet?
19. Does each WG record minutes that capture actionable items?
20. Does each WG chair coordinate with the CR2I to present interventions at the CR2C?
21. Does each action plan include measurable process objectives, impact objectives, and outcome objectives?

Questions for the site visit team to answer based on observation of R2T meetings, associated meeting products, and focus group input (generated from a focus group of R2T members):

1. What are the R2T's current objectives? What is the R2T currently doing to meet those objectives?
2. What is the R2T working on that is impactful? Why is this work impactful? What is the WG working on that is not impactful? Why is this work not impactful?
3. What role do R2Ts play in helping the CR2C achieve its intended outcomes?
4. How could R2T relationships with the CR2C be improved, if at all?
5. What role do R2T members play in helping the R2T achieve its intended outcomes?
6. What have been the R2T's main achievements within the past 12 months?
7. How can the R2T's efforts be improved?
8. Who represents this brigade in the CR2C meetings, and why?
9. How does the brigade communicate the R2T's activities to the CR2C?
10. Has the R2T identified and published a set of priorities for the brigade?

11. Does the R2T meet at least monthly and provide updates to the CR2C?

Focus group questions for stakeholders who work or provide services at the installation but are not directly involved with the CR2C, its subordinate WGs, or R2Ts:

1. Tell me about your role at this installation.
2. How would you describe the CR2C and its current work to someone in a role similar to yours who is new to the base?
3. In what ways does your unit or department work with the CR2C? How well does your unit or department work with the CR2C?
4. What is the CR2C working on that you think is impactful? Why is this work impactful? What is the CR2C working on that you don't think is impactful? Why is this work not impactful?
5. Would you say that this CR2C is successful or unsuccessful at achieving its intended outcomes? [If successful] Why do you think the CR2C is successful? What strengths facilitate its success in achieving its outcomes? [If unsuccessful] Why do you think the CR2C is unsuccessful? What barriers prevent it from achieving its outcomes?
6. What have been the CR2C's main achievements in the past 12 months?
7. Describe how you learn about the work or accomplishments of the CR2C.
8. How can the CR2C process at this base be improved?

Compliance questions for the site visit team to answer that do not require observation of meetings or convening of focus groups:

1. Are the following products available on the ACOM/ASCC/DRU SharePoint portal?
    a. CR2C minutes (most recent quarter)
    b. CR2C charter (updated within the past year)
    c. Community Resource Guide (updated within the past year)
    d. Health Promotion Improvement Plan (updated within the past year)
    e. Action plans for each working group (updated within the past year)
    f. Impact tracker (most recent quarter)
2. Is a community strengths and themes assessment from within the past two years available on the Verint Survey System?
3. Is a CR2C Program Status Report from the most recent quarter available on the Strategic Management System?

Appendix E: Alignment of Integrated Prevention Approach with Army SEM

This appendix provides further detail on the alignment between the proposed integrated prevention approach and the Army SEM.

LOE 1 alignment with Army SEM

LOE 1 proposes embedding life skills into Soldier's PME, including leveraging the MRT curriculum and PFL (or similar evidence-based alcohol education program such as AlcoholEdu). Later phases of LOE 1 recommend identifying evidence-based programs that enhance additional protective factors and mitigate additional risk factors.

Risk factors that could be addressed in LOE 1 are mostly at the individual level, but some unit and installation/community level factors are also addressed.

- Individual factors: Phase 1 of LOE 1 addresses risk factors of *age: young adult* and *rank: enlisted* by including life skills into BCT. Further, LOE 1 addresses other individual-level risk factors such as *poor mental health* (through MRT content such as avoiding catastrophic thinking and reducing anxiety), *antisocial and aggressive behavior,* and *impulsivity* (through MRT content on avoiding out-of-proportion reactions). The PFL or similar courses proposed in LOE 1 also encourage responsible drinking behaviors to mitigate *alcohol misuse*.
- Unit and installation/community risk factors: LOE 1 can reduce the influence of *toxic/permissive unit climates* by teaching life skills (such as those taught in MRT or PFL) to all incoming Soldiers. As more Soldiers come into the force with the skills to drink responsibly, a population-level prevention outcome will follow [31].

Protective factors that could be addressed in LOE 1 include factors at the individual, interpersonal, unit, and community/installation levels.

- Individual factors: Both the MRT program and PFL explicitly address *decision-making and problem-solving* through MRT modules of improving mental agility and goal-setting effectiveness, information-gathering strategies, ability to ask critical questions and identify causes and solutions, and avoiding "counterproductive" thinking patterns or errors in reasoning such as conformation bias [45]. PFL also includes content on making better decisions about substance use, including research-based information about how alcohol and drug problems can develop, and strategies for applying that

information, including how consideration of thought/behavior sequences can help people identify intervention points that can improve decisions, and coping skills for emotional regulation [27]. Further, MRT addresses *positive affect* through topics on countering "negativity bias," creating positive emotion, avoiding counterproductive or catastrophic thinking, avoiding or controlling out-of-proportion emotions and reactions, and reducing anxiety [45].

An important aspect of LOE 1 Phase 1 would be a focus on these protective factors, including incorporation of micro-applications to demonstrate how decision-making and problem-solving skills can help prevent specific harmful behaviors.

- Interpersonal factors: Interpersonal-level protective factors of *social connectedness and support* and *healthy peer relationships* are addressed through MRT curriculum on forging positive and supportive relationships, assertive communication, and active praise and response [45]. Further, the AlcoholEdu program has modules on how alcohol use can affect interpersonal relationships and how to make social connections without using alcohol or drugs [31].
- Unit and installation/community factors: At the unit-level, LOE 1 encourages *positive leader engagement* by ensuring that all NCOs receive the full suite of MRT skills at BLC. All NCOs would then be prepared to teach those skills to their Soldiers. Finally, at the installation/community level, AlcoholEdu contains modules related to *community connectedness and support* such as caring for others in an emergency, supporting recovering peers, and bystander intervention [31].

LOE 2 alignment with Army SEM

Both the H2F and CSF2 programs employ positive prevention education and training to improve the physical performance and resilience of the individual Soldier. Both also recognize that individual resilience is tied closely to psychological health, healthy relationships, and spiritual well-being. The merging of H2F and CSF2 in LOE 2 addresses many risk and protective factors, with a focus at the individual, interpersonal, and unit level.

Because the emphasis of the programs is on developing positive behaviors, we first note alignment with protective factors in the Army SEM. At the individual level, the program develops life skills such as *decision-making and problem-solving.* Chaplains' involvement in the program brings in aspects of *spirituality/religiosity* proven to be a strong protective factor against many harmful behaviors. The emphasis on connection and cohesion increases capacity for *empathy, social connectedness and support, family cohesion and support,* and *healthy peer relationships* at the individual and interpersonal level. Eventually, that propensity for connection creates a more connected and cohesive unit. Finally, leaders' involvement in this program increases *positive leadership engagement*.

Regarding risk factors, the specific fitness and resilience skills emphasized in the H2F/CSF2 programs guard against *poor mental health, poor physical health or recent medical issue, antisocial and aggressive behavior, and low self-esteem* in the individual Soldier. The physical focus also addresses risk for *alcohol misuse* by emphasizing how detrimental alcohol can be for fitness goals. By implementing the program from the beginning of the Soldier's career in bootcamp, it addresses the risk factors of *young adult* and *enlisted*. At the interpersonal level, the emphasis on connection and relationships guards against *association with unhealthy dysfunctional peer groups* and *isolation/lack of social support.* The connection emphasis at the unit level lessens the risk for *toxic/permissive unit climate,* and *toxic/ineffective, or weak leadership*.

LOE 3 alignment with Army SEM

LOE 3, with its emphasis on the CR2C organizational structure and coordination of prevention efforts, addresses factors at the organizational levels of the Army SEM. Regarding risk factors at the unit level, directly involving brigade commanders in the prevention initiatives driven by the senior commander is likely to reduce *stigma associated with reporting/seeking help* and reduce tolerance for unhealthy practices within the units (*toxic/permissive unit climate*). At the installation/local community level, the CR2C could develop initiatives to reduce *availability of alcohol*, and reduce *access to location or methods* for engaging in harmful behaviors such as sexual assault and suicide (e.g., place barriers on overpasses, keep people away from remote, poorly lit areas). At the Army SEM level, CR2Cs can develop messaging campaigns to counter *harmful norms* and reduce *stigma associated with reporting/seeking help*. They can also coordinate improved delivery methods that remove *structural barriers to accessing* prevention-related programs and resources. At the society level, the survey administered in Phase 1 may identify *weak policy or law* that the Army can lobby to address.

The protective factors that LOE 3 addresses are also at the organizational levels of the SEM. At the unit-level SEM, establishing the accountability components would ensure *unit-level policy enforcement* and could contribute to *positive leadership engagement* in the CR2C process. At the installation/local community level, the CR2C aligns with *community connectedness and support*, especially by including public health stakeholders; this LOE would enhance engagement between these stakeholders and the operational units. As mentioned above, the CR2C can also develop initiatives to *restrict or limit access to instruments of harmful behaviors.* At the Army level, CR2C revitalization could drive Army-wide *prevention policy* changes as they provide the action plans, in-progress briefs, and report metrics to HQDA. The Phase 1 survey may also inform policy development and implementation.

Appendix F: Alignment of Integrated Prevention Approach with Effective Prevention Principles

This appendix provides further detail on the alignment between the proposed integrated prevention approach and each of the following principles of effective prevention.

Socioculturally relevant

To align with this principle, programs need to address the cultural and social norms of their audiences and respect their beliefs and values while promoting positive norms that protect against harmful behaviors. Within the context of the CR2C and with support from the I-PAG (LOE 3), commanders and program providers with different expertise can collaborate to ensure that messages and programs are relevant to Army culture and to the specific local culture of the installation. For example, brigade commanders can provide feedback that a message is not resonating with Soldiers in their unit and needs to be tailored differently.

Theory-driven

Programs are aligned with this principle when they are based on well-established empirically supported theory about the causes of the behavior and the related risk and protective factors a program should address to influence the desired outcomes. As an example, LOE 1 is theory-driven because it focuses on shared risk and protective factors related to multiple harmful behaviors (e.g., negative decision-making) through theoretical and empirical literature. MRT is based on concepts from positive psychology and sports psychology. The prevention component of the curriculum is based on materials developed by the University of Pennsylvania's Penn Resilience Program, and other research in positive psychology showing that several aspects of resilience are teachable, including optimism, problem-solving, self-efficacy, self-regulation, emotional awareness, flexibility, empathy, and strong relationships. The enhancement component, developed by sports psychologists at the US Military Academy's Army Center for Enhanced Performance, teaches personal and professional skills that research has found enhance individual performance, including mental skills (such as understanding the relationship between thoughts, emotions, physiological states, and performance), confidence-building, goal-setting, attention control, energy and stress management, and imagining successful performance [46]. The PFL course is based on multiple research-backed theories of sustaining behavioral change (e.g., motivational interviewing, persuasion theory, and cognitive behavioral therapy [27], and AlcoholEdu (if incorporated into responsible drinking education)

received NIAAA's highest effectiveness rating [29]. Consistent with the recommendations of the National Research Council [23], as LOE 1 is implemented, it includes a touchpoint analysis to determine which skills need to be taught and reinforced at strategic points in a person's career.

Because LOE 2 emphasizes incorporating MRT skills into H2F training at the unit level, it is theory-driven in many of the same ways described above for LOE 1. In addition, the activities across the three phases of LOE 2 address 10 of the evidence-based risk factors in the Army SEM, and help mitigate against 14 of the 40 evidence-based risk factors in the Army SEM. The activities in LOE 2 are designed to address these factors using engaging methods at appropriate times, in alignment with evidence-based best practices to achieve the desired outcomes.

Comprehensive

Programs are comprehensive when they encompass multiple kinds of interventions at multiple levels and include universal programs as well as targeted programs for those who are at risk or in need. The proposed integrated prevention approach addresses shared risk and protective factors at all levels of the Army SEM (as depicted earlier in Table 5 and Table 6). Further, LOEs 1 and 2 encompass multiple kinds of interventions from awareness to skill-building developed in basic training and reinforced in unit. These two LOEs emphasize universal programs for all Soldiers, but LOE 2 includes connectedness activities to provide support to high-risk groups. LOE 3 includes installation-level oversight and support for prevention through the CR2C and the I-PAG. In addition, CR2C working groups may identify gaps that the installation needs to address to be more comprehensive.

Skills-oriented

Programs align with this principle when they develop social and emotional skills that protect against harmful behaviors. Both LOE 1 and LOE 2 are strongly focused on developing such skills. The objective of LOE 1 is to train life skills early in a Soldier's career and reinforce them at strategic touchpoints (e.g., with leaders at BLC). LOE 1 focuses primarily on high-leverage protective factors to develop skills that apply to prevention of multiple harmful behaviors. The MRT curriculum is explicitly skills-based, as are many of the available responsible drinking behavior curriculums. For example, the PFL and AlcoholEdu curriculums address several responsible drinking skills and behaviors, such as drink refusal skills and strategies to stay safe around alcohol and other drugs.

The primary focus of LOE 2 is on developing fitness and resilience skills, many of which align with protective factors that have been shown to protect against multiple harmful behaviors. The skills would be developed across five domains: physical, mental (encompassing emotional), spiritual, social, and family.

Focused on positive relationships

Programs align with this principle when they foster safe, trusting relationships within the training context and in Soldiers' social and work environments. Several of the skills emphasized in LOEs 1 and 2 focus on positive relationships. In LOE 1, the MRT course includes modules on strengthening relationships and building strong relationships. Further, responsible drinking modules similar to those in AlcoholEdu include discussion of social norms regarding alcohol and how to make meaningful connections without alcohol. For LOE 2, the proposed combination of the H2F and CSF2 programs encompasses promoting team engagement, developing effective communication skills, identifying character strengths in self and others, using effective praise, and using active and constructive responding. In addition, the connectedness activities proposed for LOE 2 Phase 1 are designed to help Soldiers develop positive relationships with their own family, work units, and superiors.

Delivered by well-trained, supported, and committed staff

To align with this principle of effective prevention, training needs to be delivered by well-trained, supported, and committed staff. Potentially, this can be accomplished through the I-PAG prevention specialists if the Army chooses to employ them in this way. For LOE 1, MRTs and PFL instructors in the Army are currently trained and experienced. As this program is scaled up to include BCT training to align with this principle, the Army would need to ensure that instructors continue to be trained.

For LOE 2, current H2F policies are well-aligned with this principle as they require that qualified personnel be hired as H2F coaches and cognitive enhancement specialists. In addition, physical and occupational therapists, and chaplains come to their roles with specialized training. All of these personnel will be in dedicated positions. MRTs also receive specialized training, but the unit-level MRT position is a collateral duty. Although LOE 2 does not propose making the MRT full-time, it does recommend recertifying MRTs for the reconfigured H2F program and requiring periodic recertification to maintain knowledge and skills. Moreover, integrating unit-level MRT responsibilities with those of H2F cognitive enhancement specialists and R2 performance experts will help make the workload more manageable.

For LOE 3, the CR2C, with support from the I-PAG, can ensure that the staff providing prevention programs are properly supported and resourced. The CR2C provides a venue for program directors to raise issues with the support they are getting, but also naturally generates buy-in through proximity.

Appropriately timed

To align with this principle, prevention programs should reach Soldiers as early in life as possible, when they are most receptive to change, at key transition points, or when they are at heightened risk. LOE 1 aligns with this principle because it deliberately incorporates life skills as early as possible in a Soldier's career, creating a baseline of skills to build from. Further, LOE 1 includes a touchpoint analysis to design skill refreshers at critical points (e.g., potentially before becoming a squad leader or assuming recruiting duty).

Similarly, activities proposed across the phases of LOE 2 identify several key touchpoints for when the training and education would be most effective. These touchpoints include basic training, arrival at an installation and unit, and advancing to new leadership positions.

Sufficient dosage and intensity

This principle states that programs should be of sufficient depth, length, and frequency to support sustained changes in attitudes and behavior. Although some analysis would need to be conducted to determine the depth, length, and frequency of skills training that would support sustained change, LOE 1 and LOE 2 call for training and refreshers that would occur across the career continuum. LOE 1 identifies basic training as the starting point, with leader training and additional touchpoints phased in. Similarly, LOE 2 proposes that the fitness and resilience skills in the reconfigured H2F program be introduced in basic training, and further developed at the unit level by coaches and MRTs, who would work with the Soldiers throughout their time in garrison. In addition, applications of the skills would be provided in integrated prevention modules, and the skills would be reinforced in leader PME courses. Planned pilots, such as those recommended for LOE 1, can help establish a baseline for transfer of training/behavior change that can inform future dosage and intensity determinations.

Actively engaging

To align with this principle, prevention education should use varied teaching methods that actively engage participants and incorporate opportunities to practice new skills. The skills training proposed in LOE 1 has the potential to align with this principle. Specifically, according to a R2 performance center expert, training in MRT skills must use visual displays and practical exercises. For the alcohol education component, the PFL course uses a media-rich presentation to guide instructors and engage students [26]. As life-skills courses are incorporated in later phases of LOE 1, an emphasis is needed to ensure that those courses remain engaging and informative.

For LOE 2, the existing H2F and MRT programs are designed for active engagement as personnel are to work directly with Soldiers in developing and enhancing their skills. In addition, the connectedness activities are designed to engage mentors and peers with Soldiers

and families. Finally, the integrated prevention modules would engage Soldiers in discussing and practicing fitness and resilience skills in the context of preventing specific harmful behaviors.

Incorporates systematic evaluation and refinement

The integrated prevention approach is designed to include extensive and systematic evaluation. LOE 1 includes a planned pilot of a discrete set of life skills at a small number of installations. This pilot calls explicitly for evaluation (pre- and post- intervention). Additional pilots should include similar evaluation plans designed specifically during the pilot planning. Beyond evaluations that are built into this LOE, the LOE is designed around programs that have been systematically evaluated. For example, PFL uses an instructor fidelity/quality assurance tool to evaluate instructor expertise, delivery quality, ability to provide direction and structure, ability to respectfully collaborate with participants, and skill at managing active resistance within the group. PFL has also been the subject of multiple effectiveness evaluations that tend to show positive results [27]. AlcoholEdu has also been evaluated for effectiveness and was given the NIAAA's highest effectiveness rating [29-31].

LOE 2 proposes the development of an evaluation system that would periodically assess Soldiers' fitness and resilience skills. This system would not only provide personalized feedback to individual Soldiers but also would aggregate data at the unit, installation, and Army level to help evaluate the program's effectiveness. The evaluation plan also calls for assessing the effectiveness of the integrated prevention modules at changing Soldiers' knowledge, understanding, and behaviors both initially after training and at designated touchpoints thereafter.

For LOE 3, a revitalized CR2C is uniquely poised to incorporate systemic evaluation and refinement because of the regularity with which they receive reports on program metrics from across the installation and respond with action plans developed by working groups in various program areas. The dedicated personnel in the I-PAG can help the CR2C incorporate systematic evaluation into their current efforts. In addition, the CR2C surveys conducted by the Army Public Health Command could be used to evaluate and refine the work of the CR2C.

Accompanied by victim-centered response efforts

The victim-centered response principle, although not applicable to primary prevention, was included in the set of principles applicable to the Army because of the key role response plays in a closed community such as the Army. Soldiers witness how victims of harmful behaviors are treated and, if handled appropriately, their treatment can support prevention. Effectively, then, this principle is focused on secondary prevention—but because of its centrality in the military context, we believe it is important to include. Because the integrated prevention concept is focused on primary prevention, it is not directly aligned with this principle, but Army

efforts, which are primarily response oriented, will continue alongside the suggested primary prevention efforts identified in LOEs 1-3. Thus the Army's overall efforts meet this principle of effective prevention. Additionally, the integrated prevention modules proposed in LOE 2 (Phase 2), however, incorporate resources and information on each prevention program, which would include the resources and support available to victims.

Appendix G: Alignment of Integrated Prevention Approach with Identified Opportunities and Barriers

This appendix provides further detail on the alignment between the proposed integrated prevention approach and the opportunities for and barriers to integrated prevention identified through this study.

Opportunities for integrated prevention

Opportunities addressed in LOE 1

LOE 1 capitalizes on three opportunities for integration identified in this study:

1. **Shared risk and protective factors that can support integrated prevention efforts** are incorporated as the primary emphasis of LOE 1—to build life skills first in BCT and reinforce them throughout PME.
2. **Existing resilience and fitness programs that provide a strong basis to build from** are incorporated into LOE 1's recommendation to modify and use existing MRT and PFL courses as a first step to inculcating life skills in BCT.
3. **Leveraging small unit leaders** is a component of the recommendation of Phase 2 in LOE 1 where life skills training is included for all leaders at BLC.

Opportunities addressed in LOE 2

LOE 2 capitalizes on four opportunities for integration identified in this study:

1. **Shared risk and protective factors that can support integrated prevention efforts** are incorporated in LOE 2's recommendation to inculcate life skills and protective factors in units and at multiple touchpoints.
2. **Existing resilience and fitness programs that provide a strong basis to build from** are a central component of LOE 2 that recommends merging MRT and H2F programs to create a comprehensive approach to integrated prevention.
3. **Cross-program coordination and referrals are ongoing and can be enhanced** through LOE 2 activities. The deliberate attempt in LOE 2 to merge MRT and H2F

acknowledges that these programs are already mutually supportive on some installations, and LOE 2 recommends systematically enhancing that coordination.

4. **Army Core Values that highlight positive aspects of Army culture** are noted as part of the recommendation for LOE 2. Phase 2 of LOE 2 recommends developing integrated prevention models that would align with Army Core Values.

Opportunities addressed in LOE 3

LOE 3 capitalizes on five opportunities for integration identified in this study:

1. **Existing resilience and fitness programs that provide a strong basis to build from** are part of the current CR2C structure and will continue to play a large role in the implementation of LOE 3 recommendations to enhance collaboration among entities on installations.
2. **Chaplain programs have wide-reaching capabilities**, and LOE 3 recommends engaging with spiritual programs/entities on installations to support integrated prevention.
3. **Risk reduction coordinators in ASAP already monitor trends across harmful behaviors**, and their data can be fed into CR2C discussions through coordination with the CR2I or I-PAG personnel working with the CR2C.
4. **CR2Cs create installation-level integrating bodies**, and LOE 3 recommends systematically evaluating current CR2C functioning, taking action based on the results, and improving the CR2C functions related to integrated prevention.
5. **Cross-program coordination and referrals are ongoing and can be enhanced** with LOE 3's recommendations to strengthen the CR2C's functioning as an integrating body on installations.

Barriers to integrated prevention

Barriers addressed in LOE 1

LOE 1 addresses five of the barriers identified in this study:

1. **Reactive approach and mentality** is addressed by proactively building high-leverage skills to be reinforced over time. These are broadly applicable skills that can help protect against multiple harmful behaviors.
2. **Lack of penetration of efforts to the ground level** is addressed by the primacy this LOE gives to inculcating life skills for all enlisted Soldiers upon entry. Later phases of

the work address building a broader and reinforced system of life skills for individual Soldiers.

3. **Drinking culture in the military** is addressed by developing responsible drinking skills early in one's career and reinforcing them at appropriate touchpoints along the career continuum.
4. **Program overload** is addressed by this LOE's use of current programs (e.g., MRT) when possible. Further, this LOE seeks specifically to build pervasive life skills that might reduce the need for dependence on multiple siloed programs in later phases.
5. **Lack of systematic evaluation** or program refinement is addressed through the proposed evaluation system to be conducted in combination with the Phase 1 rollout. Additional evaluation should be included in any policy or program changes that come from the pilot.

Barriers addressed in LOE 2

The reconfigured H2F program proposed in LOE 2 would address five barriers to effective prevention of harmful behaviors, including the following:

1. **Physical distance between prevention services:** Site visits to Army installations revealed that fitness, resilience, and prevention programs are geographically spread across large installations and lack a central delivery location. The "one-stop shop" proposed here would address this barrier.
2. **Reactive approach and mentality:** Rather than the traditional reactive approach of responding after these behaviors occur, this model takes a proactive approach by developing fitness and resilience skills that help prevent harmful behaviors.
3. **Program overload:** The integrated prevention modules will help reduce program overload by integrating key content into a unified training program that would replace the current mandated annual training for each harmful behavior.
4. **Lack of penetration of efforts to the ground level:** By providing services at the installation and unit levels, the reconfigured program ensures that these services are located as close to the individual Soldier as possible.
5. **Lack of relationship support structures:** This approach provides a structure for systematic, unit-level activities to create a foundation of connectedness on which leaders can build.

Barriers addressed in LOE 3

Phase 1 of LOE 3, as well as the possible changes that might result from the Phase 1 inspection, address the following three barriers to integrated prevention:

1. **Human resources issues:** Requiring CR2Is to be full-time professionals with experience in integrated prevention addresses human resource issues by ensuring that they have the appropriate skill sets for the coordinating CR2I role. This ensures that the CR2Cs function as an integrated primary prevention hub, rather than simply an information briefing focused on unit risk.
2. **Lack of penetration of efforts to the ground level:** Inspecting and aligning CR2C activities across installations with the desired intent of increasing participation in the program by command triads and other key stakeholders across the installation.[10] This may also address the issue of surrogates rather than primaries attending CR2C and WG events; those in the best position to drive change may not have full visibility or effectiveness because of their absence.
3. **Data system issues and lack of systematic evaluation:** The initial inspection in Phase 1 would identify metrics (some already collected and others not) that would enable longitudinal systemic evaluation of the installation CR2Cs.

[10] The technical guide does assert that commanders attend; however, this is not included in the Army Regulation.

Appendix H: Alignment of Integrated Prevention Approach with Program Design Elements

This appendix provides further description of the identified program design elements, their alignment with the DOD's Prevention Plan of Action 2.0 [1, 47], and their alignment with CNA's recommended integrated prevention approach.

Table 17. Program design elements and alignment with the integrated prevention approach

Category	Element	Description	PPOA 2.0 Alignment	Integrated Prevention Approach Alignment
Human Resources	Leadership: central figure or champion	Central figure or champion who acts as the linchpin and catalyst for cooperation and coordination across services, blocking attempts by those who favor the status quo [32, 48].	The PPOA 2.0 recognizes that leaders are responsible for creating and fostering a healthy climate and calls for equipped and empowered leadership.	LOE 3 aligns with this element in ensuring the effectiveness of the CR2C, which is led by the installation commander with representation from key decision-makers at each installation.
	Prevention workforce	Full-time, professional delivery staff [33].	The PPOA 2.0 calls for a full-time prevention workforce with expertise in prevention science to avoid overtaxing the military community with collateral duties.	LOE 2 ensures that fitness and resilience programs are delivered by full-time, qualified H2F personnel, with support from certified MRTs. Further, the I-PAG will have a central role in the CR2C in LOE 3.

Category	Element	Description	PPOA 2.0 Alignment	Integrated Prevention Approach Alignment
	Flexible talent and reward systems	Agile organizations adopt nimble talent management and reward systems [48-49].		
Governance	Seamless transition across services and resources	Good communication/team work across services facilitates seamless transition from one program to another, minimizing stigma associated with some services [33].	The PPOA calls for shared solutions and common prevention messaging and skill development between the prevention workforce and other similarly minded organizations.	The one-stop shop proposed in LOE 2, as well as the work of the CR2C and I-PAG in LOE 3, helps promote good communication and teamwork across services.
	Transparent and shared decision-making	Shared view of power that motivates and empowers employees, builds leader capacity through shared decision-making, and includes clear reporting chains [49-51].	The PPOA recognizes that the entire military community is responsible for creating and sustaining supportive climates and should be equipped with the tools to do so.	LOE 3 supports transparent decision-making by bringing leaders and key program managers to the table to identify problems and develop action plans to address them.

Category	Element	Description	PPOA 2.0 Alignment	Integrated Prevention Approach Alignment
Infrastructure	Services embedded at local level	Embed cross-disciplinary service providers/facilities at the local level to make services easily accessible to the client. Seeing peers utilizing services can reduce stigmas, encouraging others to use services. As many employees as possible are near or in direct contact with clients/practitioners. "Allow critical information about trends, opportunities, and issues to flow into decision-making; and prevent people from becoming ossified in their roles" [32-33, 49].		LOE 2 proposes a one-stop shop that would centralize cross-disciplinary service providers in one location at each installation. The unit-level focus of skill development in the merged H2F and CSF2 program ensures that personnel are working directly with Soldiers.
	Integrated budgets	All budgets from various services are aligned according to a shared vision [32, 51-52].		
	Adequate resources	Staff turnover, staff cuts, and lack of resources result in lower levels of prevention implementation [48, 53].	The PPOA 2.0 recognizes that the DOD must modify budgets to align resources with the new emphasis on prevention efforts.	

Category	Element	Description	PPOA 2.0 Alignment	Integrated Prevention Approach Alignment
Design	Continuous evaluation and refinement	Data collection and analysis documents successes and failures, allowing for program refinement [32-33].	The PPOA 2.0 calls for continuous evaluation of activities, programs, and outcomes.	All of the LOEs include plans for systematic evaluation.
	Agile and adaptive design	Adapt quickly to internal and external pressures for change; deliver on current objectives *and* orchestrate needed changes; develop short- and long-term scenarios that allow the organization to adapt to alternative futures [49].	The PPOA 2.0 calls for regular assessments of prevention activities to address needed changes.	Revitalized CR2Cs in LOE 3 meet quarterly to address immediate installation-level needs. This structure makes it possible to adapt to new scenarios.
	Integration mapping	Clearly outline how all members of the workforce contribute to the end goal. Help employees and partners understand the connection between their activities and the experiences of customers [54].	The PPOA 2.0 outlines the role of the prevention workforce, military leaders, and the military community in integrated prevention efforts.	CR2Cs in LOE 3, with support from the I-PAG, have the responsibility to help the entire prevention workforce understand their roles and responsibilities, and how to integrate their efforts.

Category	Element	Description	PPOA 2.0 Alignment	Integrated Prevention Approach Alignment
	Positive framing	Frame the reason for the intervention or behavior change positively (i.e. ,"if you change your behavior, these will be positive outcomes" not "if you do not change your behavior, x will happen to you" [53, 55-56].	The PPOA 2.0 recognizes the current negative perceptions towards integrated primary prevention and calls for positive engagement in new proven prevention approaches.	LOE 1 and LOE 2 seek to develop positive life skills and behaviors that build Soldier resilience and fitness. The integrated prevention modules proposed in Phase 2 of LOE 2 would demonstrate how these behaviors help prevent harmful behaviors.

Source: CNA.

Figures

Tables

Abbreviations

ARD	Army Resilience Directorate
ASAP	Army Substance Abuse Program
ASPP	Army Suicide Prevention Program
ATC	Separate Activating event from Thoughts and Consequences
BCT	Basic Combat Training
BLC	Basic Leader Course
CDC	Centers for Disease Control and Prevention
CR2C	Commander's Ready and Resilient Council
CR2I	Community Ready and Resilience Integrator
CSF2	Comprehensive Soldier and Family Fitness
DOD	Department of Defense
FAP	Family Advocacy Program
FRP	Financial Readiness Program
GAT	Global Assessment Tool
H2F	Holistic Health and Fitness
HQDA	Headquarters, Department of the Army
I-PAG	Integrated-Prevention Advisory Group
IPP	integrated primary prevention
IRA	Individual Resilience Assessment
MEO	Military Equal Opportunity
LOE	line of effort
MRT	master resilience trainer
NCO	non-commissioned officer
NIAAA	National Institute on Alcohol Abuse and Alcoholism
PFL	*Prime for Life*

PME	professional military education
POR	program of record
R2	Ready and Resilient
R2T	Ready and Resilient Team
RRC	risk reduction coordinator
SEM	socioecological model
SES	socioeconomic status
SHARP	Sexual Harassment/Assault Response and Prevention
SME	subject matter expert
TAV	technical assistance visit
TRADOC	US Army Training and Doctrine Command
WG	working group
WRAIR	Walter Reed Army Institute of Research

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