Developing a Contested Environment Implementation Framework (CEIF): Lessons Learned from Mental Health Training Planning in Wartime Ukraine

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Future large-scale combat operations (LSCO) will require dissemination of evidence-based mental health capabilities despite degraded communications, infrastructure, logistics, and access to care. Planning for a multinational mental health training initiative supporting Ukraine provided a real-world opportunity to identify implementation challenges that informed development of the proposed Contested Environment Implementation Framework (CEIF).

BACKGROUND

Dissemination of evidence-based mental health interventions in contested environments is hindered by operational, cultural, clinical, regulatory, and logistical constraints that are not fully addressed by existing implementation frameworks.

Planning for a multinational mental health training initiative supporting Ukraine during an active war revealed recurring implementation challenges that extended beyond adaptation of evidence-based interventions. These experiences informed development of the proposed Contested Environment Implementation Framework (CEIF), which organizes these challenges into six planning domains that may assist future dissemination of mental health training and capabilities in contested operational environments.

CONCEPTUAL FOUNDATION

The proposed CEIF is informed by implementation experiences during planning for mental health training dissemination in wartime Ukraine and is conceptually aligned with established implementation science frameworks.

The CEIF extends, but does not replace, existing implementation frameworks by emphasizing operational planning considerations encountered in contested environments.

Foundational concepts informing the CEIF include:

- Consolidated Framework for Implementation Research (CFIR)[1]
- Hybrid Effectiveness–Implementation Designs[2]
- Implementation Outcomes Framework[3]
- FRAME: Adaptations & Modifications[4]
- Dynamic Sustainability Framework[5]

UKRAINE EXAMPLE

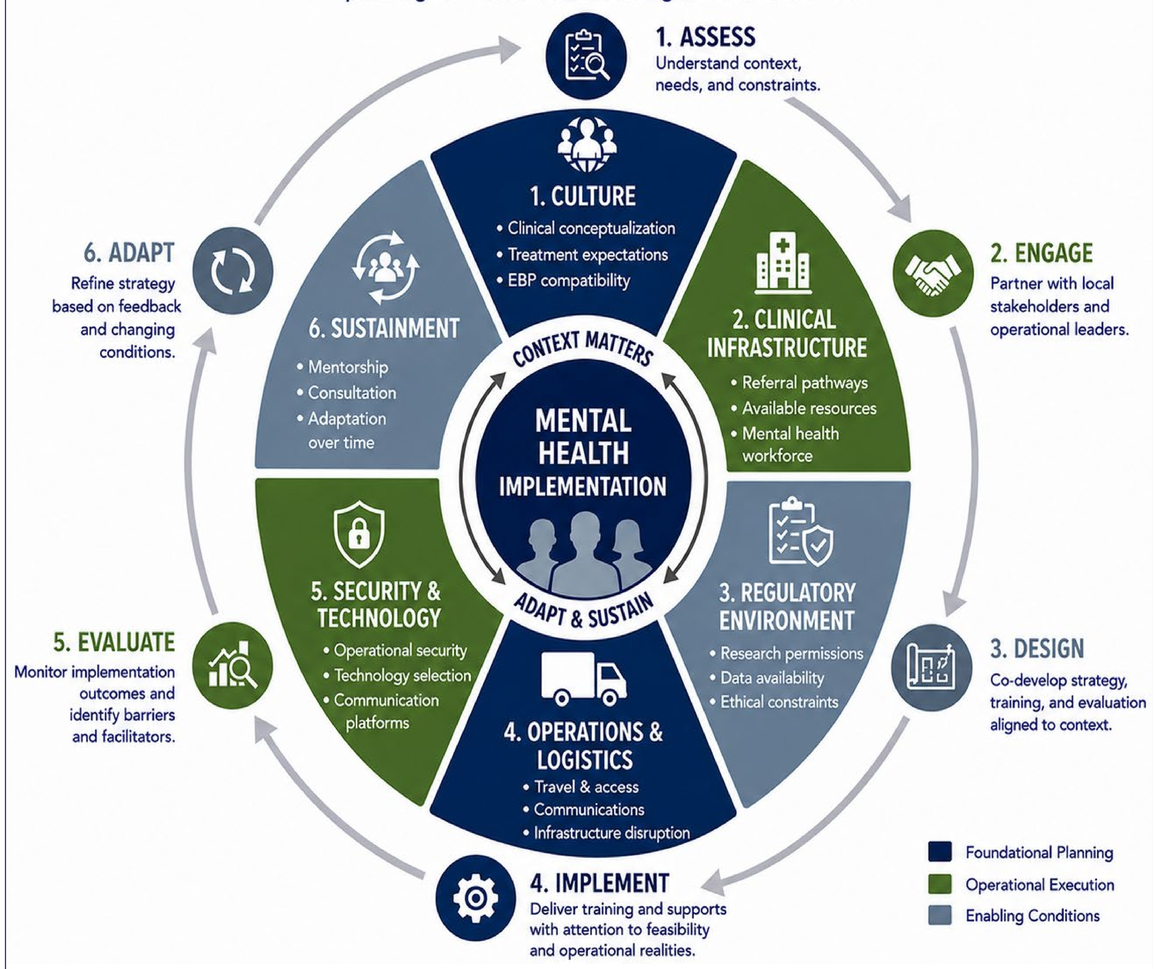
Planning for a multinational mental health training initiative supporting Ukraine required repeated adaptation in response to evolving operational realities. Through ongoing consultation with Ukrainian clinicians and implementation partners, several recurring planning considerations emerged:

- Mental health interventions required cultural adaptation and consideration of local treatment practices.
- Community resources commonly assumed in U.S. evidence-based interventions were not consistently available.
- Regulatory and operational constraints limited collection of patient outcome data.
- Security, travel, and communication constraints required modification of implementation strategies.

These recurring observations informed development of the proposed CEIF.

CONTESTED ENVIRONMENT IMPLEMENTATION FRAMEWORK (CEIF)

A proposed conceptual framework informed by implementation experiences during planning for mental health training in wartime Ukraine.



CEIF PLANNING DOMAINS

DOMAIN	UKRAINE EXPERIENCE	FUTURE PLANNING CONSIDERATION
Culture	Stigma surrounding mental health, different help-seeking norms, and reliance on trusted personal relationships influenced engagement and implementation. Standard evidence-based interventions often require adaptation to local conceptualizations of mental health.	**Engage local clinicians early.** Understand cultural norms and local conceptualizations of mental health. Tailor communication, training approaches, and implementation strategies while preserving core intervention components.
Clinical Infrastructure	Community crisis resources commonly assumed in U.S. interventions were unavailable or inconsistent. Referral pathways, available services, and treatment infrastructure differed substantially from U.S. practice.	**Assess local clinical infrastructure before implementation.** Identify available referral pathways, community resources, and treatment capabilities. Continually assess and tailor recommendations to the realities of the local mental health system.
Regulatory Environment	International regulatory differences affected project planning. Data restrictions changed during planning, limiting access to active duty personnel and requiring modification of the evaluation strategy.	**Clarify regulatory and ethical requirements early.** Design implementation and evaluation strategies that can adapt to changing operational and policy constraints.
Operations & Logistics	International travel restrictions, changing operational conditions, translation services and limited provider availability required repeated modification of training plans and implementation timelines.	**Build flexibility into implementation planning.** Anticipate changing operational conditions, interruptions, and logistical constraints when designing training programs.
Security & Technology	Security concerns limited use of communication and social media platforms and influenced dissemination planning. Operational realities affected access to technology and reliable communications.	**Select operationally feasible and secure communication platforms.** Design training and implementation strategies compatible with contested environments and available technology.
Sustainment	Weekly virtual consultation through a traditional ECHO model are unlikely to be sustainable because of operational demands and competing clinical responsibilities.	**Plan for long-term sustainment from the outset.** Select consultation and follow-up strategies that match the operational tempo and available resources.

PLANNING CHECKLIST FOR FUTURE CONTESTED ENVIRONMENT MENTAL HEALTH TRAINING

Assess Context
Evaluate operational environment, threats, infrastructure, and health system capacity

Engage Stakeholders
Build trust with local clinicians and leadership, co-create goals and solutions

Design Flexibly
Tailor training and delivery modalities to context, resources, and regulatory requirements.

Implement Adaptively
Execute with contingency plans, monitor context, adjust as conditions evolve

Evaluate Realistically
Use feasible outcomes that assess utilization, and identifies barriers before clinical outcomes

Adapt & Sustain
Capture lessons, integrate with local systems, plan for long term sustainment

KEY INSIGHT

The greatest barriers to disseminating mental health training and capabilities in contested environments go beyond the clinical and extend to operational, cultural, regulatory and logistical.

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