
Developing a Practical Resource for Research Translation and Implementation: Gathering Best Practices from the Field

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Only 14% of original health research is estimated to transition into practice. This evidence-to-practice gap is widely recognized in both civilian and military health systems and estimated to take an average of 17 years for the implementation of research into practice (Balas & Boren, 2000). A lead time of this length may result in unique barriers that delay the wellbeing, mission readiness, and care of service members. To be clear, sufficient time is required to ensure precise and ethical practices in health clinics and on the battlefield. However, current advances in implementation science can be leveraged by practitioners and researchers working with service members to mitigate this extended timeline.

The National Institutes of Health (n.d.) describe implementation as a process that involves the effective translation and use of evidence to inform practice, programming, and policies in applied context (e.g., hospitals, schools, communities). The following article summarizes an information gathering and resource development project conducted to introduce contemporary implementation science concepts and best practices used with service members. Data were gathered through interviews with military psychologists, researchers, and professionals who have implemented evidence-based programming within the military community. Synthesized responses were packaged as a practical resource (i.e., one-page “quick guide”) that was presented and distributed at the 2024 American Psychological Association (APA) Convention. The quick guide will be iteratively revised as additional information is gathered in the future.

Purpose

The primary objective of the quick guide, designed specifically for members of APA’s Division 19, was to promote best practices associated with efficient implementation of evidence-based interventions. The information gathered was grounded on the Practice-Based Implementation Network (PBIN) six-step approach to research translation and implementation. This framework is closely aligned with the Military Health System’s (MHS) agenda to mitigate the increasing demand on military behavioral health and psychological services. By developing this quick guide with best practices grounded in a sound framework, users are equipped with actionable steps to reduce the evidence-to-practice gap. Furthermore, this quick guide promotes research implementation that can be measured for effectiveness at the program level (e.g., feasibility, acceptability, equity, reach), extending beyond the typical reporting of individual indicators of success such as user experience

and patient outcomes, as recommended by psychological health researchers (e.g., Proctor et al., 2011).

Method

Interviews conducted for this project were based on a semi-structured series of prompts informed by Appreciative Inquiry (Cooperrider et al., 2008). Participants were recruited from April to June 2024. Due to the emergent nature of implementation science within the military health system and military psychological research specifically, this “snowball sampling” method was considered an effective method for the time-limited data collection period. Participants were offered an in-person or virtual option for the interview. Responses were analyzed inductively using themes guided aligned with phases of implementation. These analyses were conducted by a single coder (the author), who engaged others within the military psychology field for feedback during synthesis, but did not employ a strict qualitative protocol with a team of coders or reflexivity practices due to temporal constraints.

Results


Invited participants included senior scientists, subject matter experts, and other military professionals with research implementation experience. Recruitment emails were sent to an initial pool of ten (10) individuals who met this inclusion criteria, who referred 16 additional individuals with similar expertise. In total, 26 potential participants were sourced. Interviews were conducted over a two-month period, which allowed for virtual interviews with seven (7) respondents who represented affiliations with joint service (i.e., Defense Health Agency, Uniformed Services University for Health Sciences), Air Force Army, and Navy organizations within the United States. Almost all (72%) of the participants were mid- and late-career military psychologists.

Four (4) themes associated with implementation best practices from the field are included in the quick guide. The first theme of “Planning” captured responses associated with activities that would take place prior to conducting research in the field and early considerations for implementation of interventions or programs. The second theme “Collaborating” summarized the essential relationships that support increased likelihood of obtaining research validity and successful implementation. The third and fourth theme (“Making Progress” and “Ensuring Impact” respectively) specifically addressed common barriers to sustainable implementation and proven solutions as identified by expert voices from the field.

QUICK GUIDE

CLOSING THE EVIDENCE-TO-PRACTICE GAP

- ▶ Most original research does not impact practice; research that does (approximately 14%) takes 17 years to translate into practice.¹
- ▶ There is a widely recognized evidence-to-practice gap for health and medical recommendations.
- ▶ This gap presents a barrier to Service members' receiving optimized care within military health systems (MHS).^{2,3}
- ▶ Lack of optimized care may result in missed opportunities to support Service member well-being and readiness.

 Military psychologists can leverage research implementation best practices to reduce the evidence-to-practice gap and deliver optimized care to Service members and their communities.

- ▶ Research implementation addresses *how* innovations and interventions are created/packaged (e.g., highly engaging, tailored to the audience, connected to prior knowledge, multi-modal).⁴
- ▶ The focus of implementation is on feasibility and effectiveness, supporting MHS strategic plan objectives to address annual increases in psychological health care.^{1,4}

1

ENGAGE STAKEHOLDERS: Collaborate with leaders and subject matter experts to gain a comprehensive understanding of previous efforts/available resources; gather information.

2

TRANSLATE RESEARCH EVIDENCE: Identify core components, essential activities, anticipated outcomes, processes and tools, and comprehensive guides.

3

DISSEMINATE EVIDENCE-BASED PRACTICE: Create and package resources tailored to specific audience, develop clear messaging and techniques to be communicated across different channels. Collect feedback and refine.

4

FACILITATE AND MONITOR IMPLEMENTATION: Provide ongoing assistance and conduct regular reviews; provide periodic reports to stakeholders and determine adaptations.

5

EVALUATE PROCESS AND OUTCOMES: Analyze quantitative and qualitative data; identify lessons learned and develop recommendations for full-scale adoption.

6

SUPPORT SUSTAINED ADOPTION OF PRACTICE: Refine existing resources/develop new resources as needed; provide consultation and monitor for sustainment support with differing audiences and conditions.

Steps adapted from Practice-Based Implementation Network Approach to Research Translation and Implementation³

For complete references or to provide ideas/feedback, scan below.

1. Balas and Boren (2000)

2. Morris et al. (2011)

3. Psychological Health Center of Excellence (2019)

4. Proctor et al. (2011)



Lessons Learned from Professionals in the Field

1. ENGAGE

- Consider Service member needs and context (e.g., operational tempo, competing priorities/tasks)
- Consult official publications (e.g., doctrine, regulations, procedures)
- Identify strategic, operational, and tactical points of implementation

2. TRANSLATE

- Partner with subject matter experts and experienced personnel (e.g., retired NCOs, senior scientists)
- Develop training programs for trainers, tailored for the intended audience
- Choose appropriate implementation design and ways to innovate (e.g., social media)

3. DISSEMINATE

- Communicate to stakeholders the importance of fidelity to the intervention being evaluated
- Specify the role of leaders, trainers, and individuals involved with execution or delivery
- Determine implementation plan (e.g., key activities, schedule, roles, evaluation), but allow for flexibility and Service component considerations (i.e., Active, Reserve, National Guard)
- Find opportunities to conduct research with active units who show interest in collaborating
- Disseminate information through user-friendly formats that are quick, easy, and digestible
- Take chances and demonstrate the willingness to meet the implementation mission

4. IMPLEMENT

- Plan for potential responses or questions; prepare to adjust often to meet the objective
- Maintain focus on the end-user (e.g., operators, trainers)
- Consider individual and collective efforts that can enable progress
- Base communication on audience (e.g., Service member vs. senior leader)

5. EVALUATE

- Provide data on stakeholders' return on investment
- Engage in information sharing with colleagues to avoid fragmentation

6. SUSTAIN

- Avoid perfectionist tendencies to prevent progress towards dissemination
- Maintain momentum, buy-in, and open lines of communication with leadership
- Capitalize on opportunities to broaden impact in response to unexpected or unplanned events

IMPLEMENTATION TAKEAWAYS

- ▶ Effectiveness is dependent on varying requirements, contexts, and resources
- ▶ Consider translation, implementation, and dissemination early and throughout the research process
- ▶ Consistent funding for implementation is needed
- ▶ Relationships with stakeholders are fundamental for consistent support

RESOURCES

<https://wrair.health.mil/Biomedical-Research/Center-for-Military-Psychiatry-and-Neuroscience/CMPN-Training-Products/>

<https://cancercontrol.cancer.gov/is/training-education/training-in-cancer/TIDIRC-open-access>

<https://dissemination-implementation.org/>

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In addition to a single page of foundational implementation science content, the resulting quick guide details each theme through another single page of best practices. No direct quotations from respondents were used to maintain a high level of accessibility of the identified best practices. Furthermore, the utility of a readable and portable document (both printed and digital versions) was a top priority during the graphic design of the quick guide, which kept the depth of both the scientific knowledge and respondent reporting to only the most essential information.

Discussion

Within the MHS and in civilian health systems, implementation science is a rapidly evolving field. Practitioners and researchers of both systems should consider translation, implementation, and dissemination early and throughout the research process. Based on best practices from the field, effectiveness of evidence-based implementation is dependent on varying requirements and contexts (e.g., operational tempo, relationships with stakeholder and key leaders), as well as resources (e.g., time, funding) for research and implementation. Implementation frameworks, such as the PBIN's six-step approach utilized for this quick guide provides basis for a structured approach and continuous improvement beyond publication of research. Although a number of implementation science frameworks are available (e.g., Consolidated Framework for Implementation Research [CFIR], Damschroder et al., 2022; Designing for Dissemination and Sustainability [D4DS], Kwan et al., 2022), streamlining efforts across the MHS—including the technical, evidence-based practices for implementation science—would benefit the efforts to reduce the evidence-to-practice gap.

Limitations for this project can be categorized into several areas. First, this project was limited based on a cursory literature review, convenient sample, and low participation rate ($n = 7$, 27%). Furthermore, the information gathering methodology would have benefited from quantitative data on best practices that were identified through the qualitative information gathering process. Provided less limited time and bandwidth, the ideal project design would have been an exploratory sequential mixed method design (Creswell & Plano-Clark, 2017) to capture a holistic understanding of implementation from expert voices in the field. Additionally, the quick guide could have benefited from a professional editorial process to streamline densely packed and majority text-based content, potentially making space available within the single sheet layout for case studies, examples, or direct quotes. Overall, the study was driven by an anecdotal needs analysis and limited community feedback. The iterative revision process has been recommended and will be pursued, with the intent to include quantitative data currently being collected through the QR code on the quick guide.

Conclusion

This project, completed as a capstone to the Society Leadership Program training (<https://www.militarypsych.org/society-leadership-program>), provides the military psychology community with a resource to support research translation and implementation for the benefit of service members and their communities. In addition, it aligns to two Division 19 strategic plan objectives identified by the division leadership:

Objective 7: Develop and advocate for policies, practices, and ethical guidelines that support the role of military psychologists; and

Objective 8: Support the education, training, research, and professional development of members.

By incorporating these and other concepts associated with effective research implementation, military psychologists can broaden the reach and impacts of their work. Additionally, efforts to reduce the evidence-to-practice gap, is supportive of the leadership ethos of “BE-KNOW-DO” moving health research from scholarly knowledge for limited consumption to operationalization and wide distribution of evidence-based interventions and programs. For military psychologists in particular, utilization of implementation science best practices improves collective impact across the MHS.

During the presentation of both phases of this project (information gathering, followed by resource development) at the APA Convention in August 2024, the quick guide was received well. There is a clear appetite within the Division 19 community to learn more about research translation, dissemination, and implementation. More importantly, discussions throughout the annual convention suggested that many of these best practices are already in action across the MHS, particularly due to the work of military research psychologists. One senior Division 19 member with experience as a uniformed research psychologist and as a civilian academic researcher astutely recommended that a future version of this resource can capture lessons learned when working with key stakeholders and leaders. Although that information would be most impactful on reducing the evidence-to-practice gap within the military community, those lessons learned can be generalized broadly. Currently, military psychologists are benefitting from the extant literature on medical and health research implementation. However, the military psychology community is positioned to contribute to the implementation science enterprise with unique strategies identified through military research. As these lessons learned are documented and synthesized into best practices for readiness, wellbeing, and care of servicemembers, military psychologists can be of service to other members of the tactical population, as well as other communities seeking to benefit from a reduced evidence-to-practice gap.

Disclaimer: The views expressed in this presentation are those of the presenting author and are not necessarily those of the Society of Military Psychology (APA Division 19), the Department of the U.S. Army, or any other agency of the U.S. Government.

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