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Implementation of a Telebehavioral Health Program Evaluation Approach at Fort Hood Behavioral Health Clinics

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Abstract

Background: In the current state, the military health system (MHS) telebehavioral health (TBH) program is not extensive enough to meet the needs of warfighters and beneficiaries. Standardized implementation of TBH services cannot be ensured without systematic organizational program evaluation. A standardized program evaluation approach allows for consistent evaluation and maximizes access to quality healthcare. This will contribute to better health, improved outcomes, and ultimately, increased warfighter readiness.

Clinical Question: At Fort Hood clinics providing TBH, how does the implementation of a comprehensive program evaluation approach objectively capture data to ensure care aligns with the highest quality standards?

Design: A program evaluation of the Fort Hood TBH program.

Analysis and Results: Descriptive statistics were used to assess TBH program adherence. A 23-item approach was developed and implemented with criteria categorized into three main domains: organization, technology, and provider. Items were not met, partially met, or met and assigned a score of 0, 1, or 2, respectively. Seven out-patient behavioral health clinics participated in the TBH program evaluation approach and interviews were conducted with each clinic chief. To evaluate TBH program performance, data was aggregated and scored based on the percentage of met criteria. For the program evaluation approach domains, 6% of criteria were met for organization, 47% for technology, and 29% for the provider. The average clinic score, accounting for all three domains, was 49%.

Organizational Impact: The demand for TBH services continues to persist despite the option to return to face-to-face encounters. This project introduced a new, summative program evaluation approach that promotes the standardization, sustainment, and scalability of TBH services. This

program evaluation approach provides the foundation and a path forward to ensure the implementation and standardization of TBH services across the organization aligns with the latest evidence-based quality and industry standards.

Keywords: program evaluation, organization, technology, provider, telebehavioral health

Implementation of a Telebehavioral Health Program Evaluation Approach at Fort Hood Behavioral Health Clinics

The demand for mental health services is currently outpacing the supply of qualified mental health care providers, which limits access to care. Telebehavioral health (TBH) refers to a subset of telemedicine whereby providers incorporate the use of video teleconferencing technology to synchronously observe and interact with patients providing care in a manner to extend access to services across varying geographical distances (Bashshur et al., 2016). TBH has the capability to increase access to military members who are plagued with geographical or stigmatized barriers, decrease the provider shortage (Department of Defense, 2017), and is an existing evidence-based solution to address identified challenges (Bashshur et al., 2016; Mishkind et al., 2013; Waibel et al., 2017). Throughout the Department of Defense (DoD), mental health providers lead the utilization of the TBH platform for healthcare delivery (Department of Defense, 2017).

Solely implementing a TBH program is not sufficient to ensure increased access to care, positive patient outcomes, and consistent delivery of quality care. Evaluation of TBH implementation is crucial to program scalability and sustainability (Maeder et al., 2015). Congress has challenged the Military Health System (MHS) to report internal and external measures of quality and reliability of the current TBH system at each military facility (U.S. Government Accountability Office, 2017). Although TBH is utilized at Fort Hood behavioral health clinics, no program evaluation currently exists. The use of an evidence-based program evaluation approach can assist in the assessment of TBH program implementation and standardization.

Problem Synthesis

Mental health disorders are a common problem that affects over 60 million adults in the United States (U.S.) (Bashshur et al., 2016). Challenges with high rates of mental health disorders are due, in part, to a lack of resources including access to qualified mental healthcare providers (Lerman et al., 2018). This shortage contributes to difficulties with access to mental healthcare in the general population. Negative impacts associated with challenges in access to mental health services lead to poorer health outcomes and increased costs to the healthcare system (American Hospital Association, 2019; Bashshur et al., 2016).

Similar to the general population, access to mental health services is also a challenge for military service members (SMs) (Hom et al., 2017; Shore et al., 2014). Stigma continues to impact treatment seeking with the perception it could adversely affect the SMs career. Because of this negative perception, there is a decrease in treatment-seeking behaviors among military SMs (Colpe et al., 2015; Ghahramanlou-Holloway et al., 2018). Mental health-related appointments among active duty troops accounted for roughly 16% of all military medical appointments, or 1.8 million outpatient visits in 2018. Additionally, the prevalence of having any mental health condition among military SMs increased from 8% in 2005 to 15% in 2016, thus highlighting the need for increased access to high-quality mental health services (Defense Health Agency, 2017).

TBH is an effective solution that circumvents stigma barriers and addresses the shortage of mental health resources, increases access to care, and facilitates the delivery of care (Bashshur et al., 2016; Mishkind et al., 2013; Waibel et al., 2017). Additionally, TBH is a military healthcare priority and in alignment with the healthcare initiatives of the MHS and Defense Health Agency's (DHA) Quadruple Aim (Defense Health Agency, 2019; Waibel et al., 2017). The effective utilization of TBH services will lead to better health, better care, and ultimately,

increased warfighter readiness. In order to assess organizational implementation of TBH, a standardized evidenced-based evaluation approach is recommended (Standing, et al., 2016; Vis et al., 2018; Waibel, et al., 2017). A standardized program evaluation approach allows for consistent evaluation and ensures maximized access to the highest quality, TBH services enterprise-wide.

Relevance to Military Nursing

A military focus on TBH services and the need to prioritize expansion came to light following the passing of the Fiscal Year 2017 (FY17) National Defense Authorization Act. From the enactment of this law came a congressional mandate to report internal metrics of quality and reliability (Waibel et al., 2019). An evidence-based approach should validate current practices, assess the quality of TBH programs, and ensure alignment with DHA's Connected Health core mission and vision (Health.mil, n.d.). The recommended program evaluation approach for this project aligns with the Virtual Health Strategic Plan initiative to implement a virtual health program evaluation to facilitate expansion and enhancement of TBH services (Department of Defense, 2018).

As the military continues to utilize TBH platforms in healthcare, an evidence-based program evaluation can assist in the optimization of care and resources, thus contributing to positive patient outcomes. Furthermore, a standardized, evidence-based TBH program evaluation approach is needed to support continuous process improvement and alignment with the healthcare initiatives of the MHS and Defense Health Agency's Quadruple Aim. This project strives to synergize efforts in the promotion and expansion of TBH within the military healthcare community through expanding the foundation of knowledge to build best practices and TBH program standardization, sustainment, and scalability.

Clinical Question

At Fort Hood clinics providing TBH, how does the implementation of a comprehensive program evaluation approach objectively capture context specific data to ensure care aligns with the highest quality standards?

Search Strategy and Results

To guide the literature search, the PICO question was "In behavioral health clinics implementing TBH (P), how does a standardized TBH program evaluation checklist (I), compared to no evaluation (C), affect the organization's reporting of structure and process outcomes (O)," The databases accessed for articles to include in the literature review of the solution were CINAHL, PubMed, and PsychInfo (OVID). A combination of the following search terms were used: "telebehavioral health" OR "telemental health" or "telepsychiatry" AND "program" AND "evaluation" OR "program evaluation checklist" AND "organizational outcomes" AND "organization" AND "technology" AND "provider." Results were limited to the past ten years, English language, and peer-reviewed scholarly journals. Dissertations, notes, editorials, books, or summaries were excluded. As of September of 2020, CINAHL yielded 92 results, Pubmed 57 results, and PsychInfo 29 results for a total of 178 articles. Of the articles identified in the initial search, nine duplicates were removed leaving 169 for screening of title and abstracts.

Title and abstract screening were performed with adherence to the following inclusion criteria: discussed criteria necessary for TBH program evaluation, TBH implemented in the outpatient clinic setting, and barriers and facilitators to the implementation and standardization of a TBH program. Articles were excluded if they did not specifically discuss a TBH intervention, primarily discuss patient outcome measures, or did not address criteria necessary

for a TBH program evaluation. Screening resulted in 42 full text articles for review; of those, 36 articles were excluded based on exclusion criteria and six articles were subsequently selected for the literature review of the solution (see Appendix A). Article appraisal was performed utilizing the Johns Hopkins Nursing Quality of Evidence-Based Practice tool to assign a level of evidence and quality rating resulting in two Level V articles, three Level III articles, and one Level I article (see Appendix B).

Solution Synthesis

The presence of a TBH program is not enough to guarantee sustainable and reproducible process and quality clinical outcomes. Continuous performance monitoring and improvement of the TBH infrastructure is important for program sustainability (Greenhalgh et al., 2017). Conducting a piecemeal evaluation devalues the impact of the program as a whole, which in turn limits the adoption and expansion of TBH services (Maeder et al., 2015). Therefore, the development of a comprehensive approach founded in evidence, but flexible enough to adapt to the needs of the organization, is essential to the program evaluation process (Greenhalgh et al., 2017; Maeder et al., 2015; van Dyk, 2014).

The development of a program evaluation approach can be difficult due to the complexity of TBH which includes the lack of standardized definitions and measures, inconsistent evaluation methodologies, and interdependent discipline involvement (Chang, 2015; Greenhalgh et al., 2017). However, commonly identified TBH determinants of success can be categorized into larger, more manageable domains. The taxonomy of TBH consists of three major domains which significantly impact its uptake and quality. These domains include the organization, technology, and provider (Greenhalgh et al., 2017; Hilty et al., 2020; Maeder et al., 2015; van Dyk, 2014; Vis et al., 2018).

Organization

The first domain to evaluate is organization. Organization subdomains include organizational support, policies and standard operating procedures (SOPs), and organizational priorities and performance indicators (Greenhalgh et al., 2017; Hilty et al., 2020; Maeder et al., 2015). Key elements of organizational support require fostering a culture of technological acceptance with defined norms, roles, and routines (Greenhalgh et al., 2017; Hilty et al., 2020; Vis et al., 2018), mechanisms and means for disseminating information to all clinics using TBH (Vis et al., 2018), and embedding TBH champions throughout the organization (Greenhalgh et al., 2017; Vis et al., 2018).

Pertinent TBH policies and procedures must be clearly accessible to all clinic staff and leaders. Additionally, policies need to include information related to emergency management protocols (Glueckauf et al., 2018; Luxton, 2016) and TBH clinical practice guidelines, standards, credentialing and licensing (Vis et al., 2018). The organization should also have legal and ethical policies and procedures for TBH program deployment and delivery of care (Greenhalgh et al., 2017; Vis et al., 2018). Priorities and performance indicators should reflect a clear organization vision, mission, structure, outcome, and process measures, as well as work plans (Vis et al., 2018). Additionally, there must be coherence in TBH agendas and priorities between higher echelon organization leadership and clinic leadership (Greenhalgh et al., 2017).

Technology

The second domain is technology which includes infrastructure, interoperability, and end-user operability subdomains (Greenhalgh et al., 2017; Hilty et al., 2020; Vis et al., 2018). Infrastructure includes computers, web cameras, bandwidth, speed, internet connection, computing, encryption capability, data security. Data security must meet the security

requirements of the Health Insurance Portability and Accountability Act compliance with up to date antivirus, anti-malware, and firewall software, and data storage software (APA, n.d.; Greenhalgh et al., 2017). The availability of offices, space, and relevant TBH equipment is also important to assess in TBH program evaluation (Hilty et al., 2020; Vis et al., 2018). All clinic staff that may be required to perform TBH operations in a deployed setting should have the same TBH setup, operating systems, and troubleshooting capabilities (Mishkind et al., 2013).

Systems interoperability is important given the multitude of healthcare technology platforms and electronic health records systems utilized throughout the MHS. The organization must determine if the systems used in TBH are compatible and cross communicate with each other (Vis et al., 2018). Single sign-on technology and intelligent portal designs are recommended to facilitate interoperability and ease of system use (Vis et al., 2018). Additionally, end-user operability is critical as TBH systems that are difficult to operate in practice will deter end-users from consistently and appropriately using TBH (Cowan et al., 2019). Availability of information technology experts, clear step-by-step instructions for TBH system access and use, and pre-identified clinical workflow contingency plans for technology failures promote the use of TBH technology (Vis et al., 2018).

Provider

The third domain is the provider which includes competency, training, and attitude and intent to use subdomains (Hilty et al., 2020; Vis et al., 2018). Competencies guide the appraisal of provider performance against formal expectations established by national credentialing bodies and local command requirements. Specific TBH competencies and skills are needed for every provider delivering TBH services to ensure the delivery of consistent, appropriate, and safe care (Hilty et al., 2020; Vis et al., 2018). Training is the formal indoctrination process mandated of all

providers prior to initiating TBH practice. Modalities can include formal education, credentialing, peer-group learning, and high fidelity TBH simulation training (Hilty et al., 2020; Mishkind et al., 2013; Vis et al., 2018). Online training and in-services are commonly used in the military setting. Content of the training should incorporate technical and therapeutic training as well as educating providers on TBH benefits and utilization to routinely offer TBH to overcome patient barriers (Fletcher et al., 2018). The authors surmised that internal evaluation by clinic leadership and providers is necessary when determining the number and length of training required to confirm and support provider competency in TBH.

Attitude and intent to use TBH play crucial roles in its utilization by the provider (Greenhalgh et al., 2017; Hilty et al., 2020; Vis et al., 2018). A program evaluation approach must include an appropriate instrument in which to capture this data. For example, constructs from the Uniformed Theory of Acceptance and Use of Technology and the Technology Acceptance Model can be transformed into a questionnaire format to measure provider attitude and intent to use TBH in their clinical practice (Harst et al., 2019). Additional influential factors include TBH experience, perceived value (Greenhalgh et al., 2017; Hilty et al., 2020; Vis et al., 2018), performance and effort expectancy, social influence, and facilitating conditions (Harst et al., 2019).

The solution, in response to Congressional mandates for identification of internal measures of quality and the identified process gap at Fort Hood, is the implementation of an evidence-based evaluation approach that contains contextually appropriate structural and process measures (Hilty et al., 2020; Maeder et al., 2015; U.S. Government Accountability Office, 2017; Vis et al., 2018). A standardized program evaluation approach comprehensively assesses organizational, technological, and provider alignment with established national and military

professional guidelines for high-quality delivery and utilization of TBH (Greenhalgh et al., 2017; Hilty et al., 2020; Maeder et al., 2015; van Dyk, 2014; Vis et al., 2018).

Focus Areas

There is a need for an organizationally appropriate and adaptive approach to a TBH program evaluation. After a thorough review of the literature and needs-based assessment of the current TBH program at Fort Hood, three focus areas for the project were identified. First, a program evaluation approach was developed containing organizational, technology, and provider structural and process measures to improve the standardization of TBH services and delivery of care (Greenhalgh et al., 2017; Maeder et al., 2015; van Dyk, 2014). Secondly, the TBH program evaluation approach was implemented at Fort Hood behavioral health clinics. Lastly, program evaluation results were disseminated and recommendations formulated to enhance TBH sustainment and scalability.

Business Case Analysis

At present, the opportunity exists to bolster the quality expansion for TBH services enterprise-wide in a manner that aligns with organizational mandates and priorities. In FY17 alone, over 20,000 TBH encounters were purchased to meet the care needs of the warfighter and beneficiaries (Department of Defense, 2018). If the military is able to bring just the active duty service member purchased encounters back into the direct care network, the potential exists to recoup over $72,000 in costs annually (see Appendix C).

Alternatives to the proposed approach do not offer the robust internal assessment measures that are critical to a quality TBH program. This program evaluation approach incorporates latest evidence-based standards of performance that ensures all points of quality are

taken into consideration. Finally, our program evaluation approach aligns with the needs of the organization based on current strategic initiatives for TBH services.

Organizing Framework

The Model for Evidence-Based Practice Change (1999) was utilized to guide the implementation of the project (see Appendix D). Originally developed by Rosswurm and Larrabee in 1999, this six-step model is based on evidence-based practice research literature and utilization, standardized nursing nomenclature, and change theory (Rosswurm & Larrabee, 1999). The model's six steps include: (a) assess the need for change, (b) link the problem with interventions and outcomes, (c) synthesize the research, (d) design the plan, (e) implement and evaluate the plan, and (f) integrate and maintain the findings (Rosswurm & Larrabee, 1999). First, the current status of the TBH program at Fort Hood was assessed through communications with stakeholders and determined a need for change regarding program evaluation. Following this assessment, the best evidence for a program evaluation approach was located and linked the problem with a contextually appropriate program evaluation approach. Additionally, the evidence was synthesized and an approach designed with consideration of its implementation feasibility, barriers, and benefits. Next, the approach was implemented and evaluated the TBH program. Following the evaluation, results were communicated to key stakeholders at which point they could adopt, adapt, or reject the program evaluation approach based on disseminated findings. (Rosswurm & Larrabee, 1999). The steps outlined in the Model for Evidence-Based Practice Change guided the systematic process of implementing the TBH program evaluation, analysis, and dissemination of findings.

Project Design

General Approach

This project was a program evaluation of the TBH services at Fort Hood. The implementation of a program evaluation approach assessed the current status of the program and determined if it aligns with DoD initiatives and Congressional mandates. The program evaluation approach was implemented at all outpatient behavioral health Fort Hood clinics using TBH services for their adult population. Upon completion of the project, recommendations were based on identified areas of strengths and areas of improvement. Findings were provided to Fort Hood key leadership and stakeholders.

Setting and Population

The implementation of the program evaluation was conducted at Fort Hood, Texas; specifically, at outpatient behavioral health clinics currently utilizing TBH services for adults greater than 18 years of age. Fort Hood is one of the largest military installations in the U.S. servicing approximately 36,500 active duty soldiers (Military Installations, 2020). TBH is utilized at six embedded behavioral health clinics, one multidisciplinary clinic. These clinics are staffed with active duty military and civilian professionals including psychiatric mental health nurse practitioners, psychiatrists, licensed clinical social workers, clinical psychologists, nurse case managers, licensed practical nurses, behavioral health technicians, and medical support staff (Carl R. Darnall Army Medical Center, 2017). TBH technology platforms trialed or currently in use at Fort Hood are Google Duo, Skype, Adobe Connect, Doxemity, and FaceTime. The patient population receiving TBH services at the outpatient behavioral health clinics consists primarily of active duty service members.

Procedural Steps

The project was executed in five phases aligning with the Model for Evidence-Based Practice Change (see Appendix E). Phase one entailed performing a needs-based assessment of

the current Fort Hood TBH program through communications with stakeholders. Additionally, a TBH program evaluation research and literature review was conducted to support the development of a TBH program evaluation approach and linked the identified performance opportunity to potential solutions and outcomes. An essential component in phase one was maintaining regular contact with Fort Hood stakeholders and leadership to foster collaboration and relationships, encourage leadership buy-in and facilitate the implementation of the program evaluation approach. The information gathered from meetings and literature search ensured the approach was evidence-based and contextually appropriate. Phase two encompassed the synthesis of evidence-based metrics to be used, benchmarks to be met, and best practices for a TBH program evaluation approach. This information provided the foundation for the design and development of the TBH program evaluation approach (see Appendix F).

Phase three was the implementation of the program evaluation approach and data collection. See Appendix G for the checklist that was implemented for the program evaluation. The evidence-based checklist was used to systematically assess the TBH program. This phase yielded a baseline assessment and identification of deficiencies or strengths of the TBH program at each clinic utilizing TBH services. The results of this evaluation helped identify deficiencies and changes necessary to achieve a more efficient TBH program.

Phase four included the evaluation of findings and analyzing the data from the program evaluation. Based on the data evaluation and analysis, areas of strength and improvement for the TBH program were identified. Phase five included dissemination of findings, integrating recommendations, and maintaining strengths identified from the evaluation. A TBH resource handbook was provided to key stakeholders outlining the program evaluation recommendations.

Data Analysis Plan

Descriptive statistics were used to assess TBH program adherence with the outlined evidence-based program evaluation approach. The independent variable was an event-oriented unit of analysis and corresponds to the date of the program evaluation. The 23 dependent variables (DV) correspond to the evaluated individual checklist items. Our DVs were aligned under three main domains of analysis; namely: organization, technology, and the provider. Each DV was scored on a scale of 0 to 2. A score of 0 indicated that the variable was not met or not present. A score of 1 indicated that the variable was partially met. If a variable is partially met, a qualitative supporting comment was annotated on the evaluation justifying this selection. Finally, a score of 2 indicated that the variable was either met or present during the evaluation.

Descriptive statistics were used to conduct two types of comparisons in our data analysis. First, we calculated each clinic's adherence score by adding up their DV measures and dividing that by the total number of items (23) and multiply by 100% to give adherence percentage. We identified a threshold of 70% or lower to indicate a need for further evaluation with the ideal adherence value set at 90% (Ament et al., 2015). Secondly, we calculated overall adherence for each DV across all clinics evaluated by adding up the individual DV measure at each clinic and divided that number by the total number of clinics evaluated. This number was then be multiplied by 100% to give overall adherence percentage for each DV across all clinics evaluated at Fort Hood. For this value, we used the same adherence threshold described above.

Project Barriers

A risk mitigation plan was developed to address possible human, evaluation, organizational, and sustainability-related concerns. In the context of human barriers, potential difficulty communicating an understanding of and instilling awareness about the evaluation to key stakeholders within the organization was recognized. To attenuate this risk, clear

communication with stakeholders was prioritized to bolster supportive interpersonal relationships with leadership and staff to facilitate the evaluation process. Mutually supportive and trusting relationships helped address and overcome concerns about past experiences with evaluation, negative attitudes towards evaluation, and any interpersonal personality challenges. Shared knowledge and open communication about the data privacy plan alleviated concerns about negative results or fear of reprisal from the evaluation process (Taut & Brauns, 2003).

Opportunities to communicate with the greatest organizational impact included briefings at clinic staff meetings and leadership meetings. Organizational challenges included the tempo of staff turnover, a culture resistant to change, and team member awareness of TBH current context. Pursuant relationship building with key stakeholders helped achieve buy-in and facilitate a culture of change that embraced the uptake of the evaluation (Greenhalgh et al., 2017).

Identification and partnership with local TBH coordinators further improved the odds of sustainment of the evaluation and offered a source of support to end-users (Fletcher et al., 2018). Additionally, a clinic with a high paced tempo may have limited availability of administrative time to allow the evaluation to take place. To address this, team members leveraged relationships with stakeholders to allow staff protected time to participate in the evaluation that did not interfere with clinic duties (Interian et al., 2018).

Sustainment and Dissemination Plan

Dissemination and presentation of program evaluation findings and recommendations are critical to sustainability. Team members collaborated with local stakeholders to make recommendations that outlines TBH program evaluation at regular intervals (Mishkind et al., 2013). A TBH resource handbook was created based on findings and outlined recommendations to align TBH program services with evidence-based practices and industry standards. Upon

project completion, findings, recommendations, and resource handbook were disseminated to key stakeholders and local leadership to promote and enhance TBH standardization and sustainment at Fort Hood. Poster presentations at local and national platforms highlighted findings and showcased recommendations for further clinical study. Target audiences for these presentations included Fort Hood and Uniformed Services University of the Heath Sciences stakeholders, DHA Virtual Health working group, and those providers, military and civilian, actively engaged in the implementation of TBH.

HIPAA Concerns and Safeguards

The team sought local institutional review board determination and privacy review prior to project initiation. All data files associated with the project were password-protected and only accessed by authorized team members. Data and project materials were securely stored in a password protected file on a common-access-card (CAC) enabled computer. These safeguards combined with the security measures taken by the project team members helped ensure data are safely and accurately stored.

Team members followed the de-identification standard outlined in section 164.514(a) of the HIPAA Privacy Rule via the “Safe Harbor” method (U.S. Department of Health & Human Services, 2015). In alignment with this provision, the collection or use of any patient health protected information was strictly prohibited. This statute was applied, in the same, to employees associated with our data collection. Further, aggregated data was screened for the potential to identify a single provider or clinic based on any single data set.

Project Results

Seven out-patient behavioral health clinics participated in the TBH program evaluation approach and were a mix of six embedded behavioral health clinics and one multidisciplinary

clinic. Interviews lasting 45-60 minutes were conducted with each clinic chief who were a combination of military and civilian psychologists and licensed clinical social workers. To evaluate TBH program performance, data was aggregated and scored based on the percentage of met criteria. Bar graphs are utilized to display variation in DV scores across clinics, domains, and sub-domain criteria.

The average clinic score, accounting for all three domains, was 49% with a range from 39% to 61% total criteria met (see Appendix H). For the program evaluation approach domains, 6% of criteria were met for organization, 47% for technology, and 29% for the provider (see Appendix I). The following criterion performed the best in the organization domain: TBH use is supported in clinic culture. The following criterion performed the best in the technology domain: infrastructure aligns with technological and security standards, appropriate physical space available for TBH care, and information technology support is available. The following criterion performed the best in the provider domain: providers are educated on clinical indicators for TBH use. Appendix J outlines the results of each DV clustered by subdomain. Criterion that was partially met was qualified with subjective reports from the interviewee to present a well-balanced picture of the assessment and identification of more nuanced areas of strength and opportunities for improvement.

Analysis of Results

This project introduced a new, summative program evaluation approach that promotes the standardization, sustainment, and scalability of TBH services. For the first program evaluation, the Fort Hood TBH program performed well overall meeting a portion of the 23-item checklist and objectively captured context specific data. However, the data from the evaluation conducted at Fort Hood also indicates a priority for remediation and subsequent reevaluation of the

program. All of the clinics utilizing TBH did not meet benchmark expectations and performed below the identified evidence-based project standard of 70%.

The domain that had the most criteria met was the technology domain and the organization domain had the least criteria met. Qualitative findings from the data collection process yielded several consistent themes across the surveyed clinics. Within the organization domain, a current consensus is that TBH only be used by exception as opposed to routine care. Organization policies and procedures directing the use of TBH are currently lacking. The lack of organizational TBH policy at Fort Hood was inconsistent with current literature and practices as most TBH programs have identified and accessible policies in place. However, the development and dissemination of a TBH policy that encompasses items listed in the organization domain can improve the organization domain score. Common organization barriers included the lack of assigned personnel dedicated to training and guiding personnel on the setup for and use of TBH. Lastly, a shift in organization mission and priorities can be made to indicate the relevance of TBH more clearly to the embedded care mission and further specify dissemination procedures for practice updates.

Within the technology domain, the status of clinic information technology hardware and software was a commonly cited concern. Specifically, the unpredictability of the operational status of the network and phone lines. Further, the status of connectivity and bandwidth availability at the patient's end was a notable barrier. To help address these considerations, it was discussed that a more clearly defined contingency plan is warranted to ensure proper procedural steps are in place to meet established standard of care requirements.

Finally, discussion of provider related considerations noted ongoing assessment of provider competency and new employee orientation is not taking place. The lack of or difficulty

in developing and standardizing TBH training and competency requirements is consistent throughout the literature and in this project's findings. Offering initial and ongoing training opportunities and developing TBH competency assessment measures can improve the provider domain score. Further, assessment of provider satisfaction and outlet for channeling provider concerns are not in place. Lastly, a shared understanding of what TBH looks like within the embedded behavioral health mission in terms of appropriateness for use and fitness for duty remains ambiguous and a notable area for clarification.

Project limitations included the organizational restructuring of clinic chiefs as well as hiring new chiefs. This contributed to reports of limited historical context specific to the clinic. Furthermore, availability of longitudinal data detailing the trend of TBH based encounters was encountered. Further, the hasty switch to a fully virtual based care model during pandemic may have led inaccurate coding of encounters that did not reflect true TBH utilization. While these examples may have complicated data gathering, they did not necessarily prohibit the successful execution of the TBH program evaluation.

Organizational Impact

The demand for TBH services continues to persist despite the option to return to face-to-face encounters. The results from this program evaluation impact the organization at macro and micro levels. From a macro, MHS perspective, optimization of a TBH program, through evaluation, aligns with principles outlined in the Quadruple Aim for maximum organizational impact. Utilization of TBH services to the fullest extent can reduce wait times for appointments, maximize access to high quality, evidence-based care and can be standardized via the implementation of a program evaluation approach. A comprehensive and robust TBH program can reduce stigma and encourage treatment seeking behavior through enhancement of alternative

TBH care access. Through conducting a TBH program evaluation, the organization can identify cost reduction opportunities, recapture purchased TBH care and maximize efficiencies in sustainment of technologies, workflows, and business processes. Furthermore, program evaluation can improve program standardization, effectiveness and efficiency leading to lower healthcare costs.

From a micro, Fort Hood perspective, proposed practice and policy recommendations address all three program evaluation domains. The development and inclusion of organization criteria into a singular, comprehensive TBH policy is recommended for the standardized execution of TBH services amongst all clinics. Technology recommendations include the use of a singular TBH platform with reliable connectivity and access by both the provider and patient. TBH champions and information technology support resources are recommended to be readily available in-person and virtually to all TBH end-users. Provider recommendations include initial and ongoing competency assessment and training with easily accessible continuing education opportunities. Implementation of a TBH program evaluation and proposed recommendations, in furtherance of Quadruple Aim principles, ultimately contributes to the delivery of quality care, improved healthcare outcomes, and increased warfighter readiness.

Future Directions for TBH Research and Practice

Future directions for TBH program evaluation research include the continued study of criteria that positively impacts the successful uptake, standardization, sustainment, and scalability of TBH programs. Additional research opportunities include the exploration of program implementation and competency frameworks, and examination of TBH competencies, education and training to ensure quality care across behavioral health specialties. Continued exploration of facilitators and barriers to TBH program evaluation is also recommended and the

analysis of considerations for application within the pediatric, dependent, and retiree populations.

Future directions for military clinical practice are singularly oriented and streamlined in nature with the rollout of one synchronous video platform, one electronic health record system, and one electronic psychometric scale data base. As a result, more direct and specific TBH program guidance and policy will come from DHA. Future practice directions also include the implementation of program evaluation at other installations to promote standardization of care across the MHS.

Conclusion

Readily available high-quality TBH services is the priority end state for the MHS. The ability to implement a comprehensive program evaluation approach provides a foundation and path forward to ensure the implementation and standardization of TBH services across the organization aligns with the latest evidence-based quality and industry standards. The findings of this project offer key stakeholders actionable data to ensure initiatives and mandates for TBH services are fully met.

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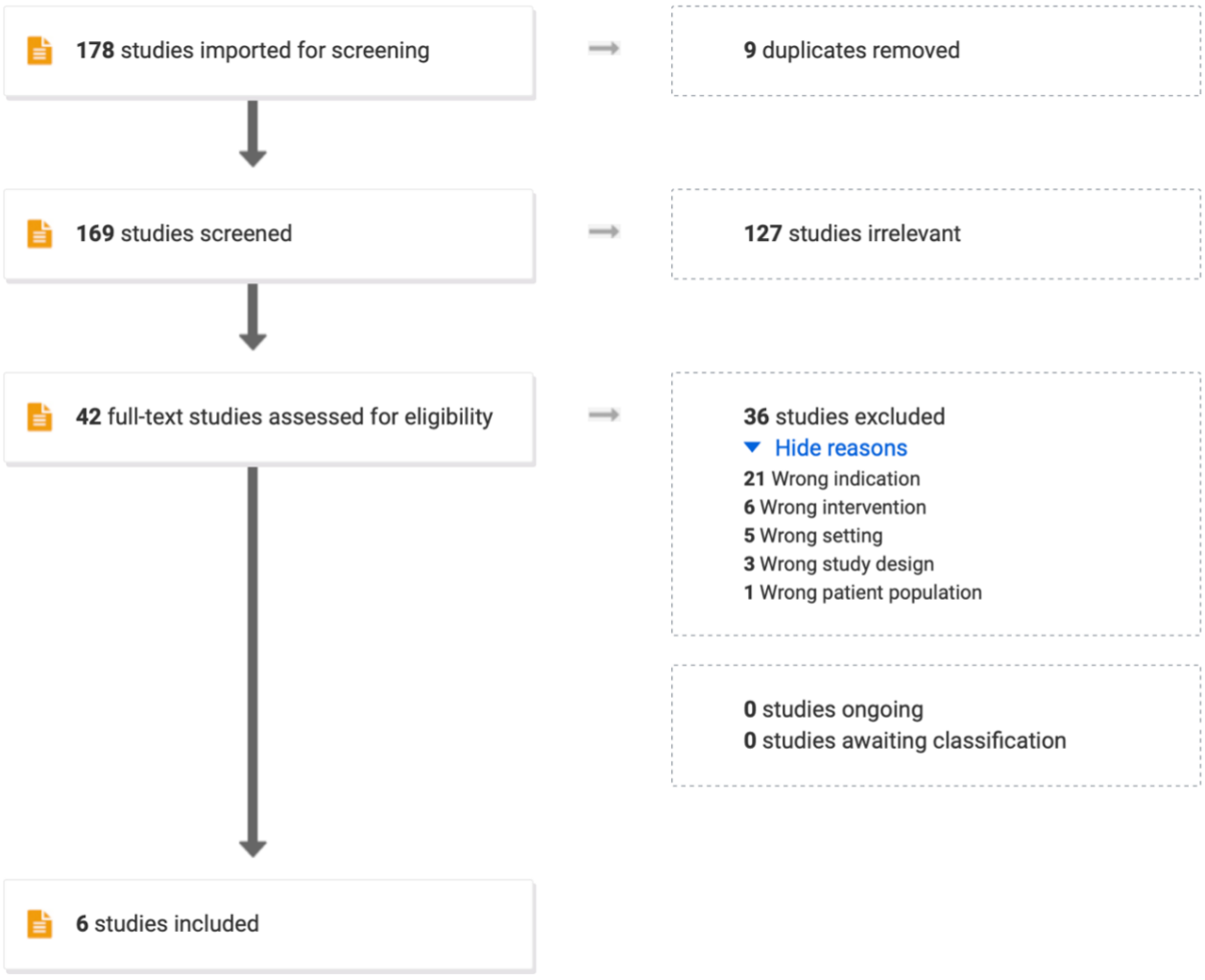
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Appendix A

PRISMA Diagram



Appendix B

Johns Hopkins Nursing Quality of Evidence-based Practice Tool

1st Author Name & Publication Year	Study Purpose/Aims/Research Question	Study Design	Total Sample Size (initially & at end)	Sampling Plan	Independent Variables & Level of Measurement	Dependent Variables and Level of Measurement	Statistical Analyses: What tests were used for which research questions?	Results	Strengths (how promoted internal/external validity)	Weaknesses (biases, threats to internal/external validity)	LEVEL OF EVIDENCE - using JHNEBP tool (Strength and Quality)	Citation
Mishkind (2013)	Process improvement initiative designed to better understand the training program strengths and opportunities for improvement. Provide overview of the development and delivery of TBH training with a specific emphasis on the hands-on aspects of training. Training participants were asked to rate their level of agreement with ten general statements about how the training impacted understanding of TBH procedures and applications.	Process improvement evaluation via survey and participant feedback.	Thirty-six participants completed evaluations within 1 week before the training session (pretraining; one participant did not attend the training) and 34 completed training assessments within 2 weeks following the session (post-training).	Thirty-six Service Members from the 1972nd CSC participated in the training session including psychologists, social workers, psychiatric nurse practitioners, occupational therapists, mental health specialists, medics, and other non-medical support specialists.	Pre-Deployment TBH Training Process measure	DV = Participants perception and feedback of TBH training received. Measurement tool = Survey data - Likert scale Ordinal level data	No statistical tests identified in the article. Quantitative and qualitative analysis of Likert style survey responses identified mean, median, mode of the results.	Descriptive statistics (mean (m) and standard deviation (SD) of participant survey results). Pre-deployment/post training results indicated training was relevant to my unit needs (m =4.24, SD = 0.89). Teaching methods were effective (m= 4.21, SD = 0.88) and visual aids, hangouts, and oral presentations clarified content (m=4.25, SD= 0.89). Post-deployment surveyed items indicated that equipment was similar to the equipment used in theater (m= 4.36, SD= 0.76) but results indicated that training scenarios did not exactly reflect actual encounters in theater (m= 3.64, SD= 1.06). 84% of participants indicated that the pre-deployment training helped prepare them for in-theater operations.	Provides valuable real-world military operational data on the use of TBH in a deployed setting to include participant feedback and constructive courses of action to enhance the use of TBH in future operations.	Possibility that the recommendations will not generalize to other units, Services, or theaters of operations.	Strength level V, good quality	Mishkind, M. C., Boyd, A., Kramer, G. M., Ayers, T., & Miller, P. A. (2013). Evaluating the benefits of a live, simulation based Telebehavioral health training for a deploying army reserve unit. Military Medicine, 178(12), 1322-1327. doi:10.7205/milmed-d-13-00278
Luxton (2016)	Compare the safety, feasibility, and effectiveness of Home-Based TBH to care provided in an office-based setting among military personnel and veterans. **Hypothesis** = In-home care would be no-worse than in-office care on clinical measures that reflect safety and clinical outcomes (measures of hopelessness and depression scores) and that participants in both groups would show improved hopelessness and depression scores at treatment end. BATD delivered in home would be as safe as in-office treatment. Behavioral activation treatment for depression (BATD) can be feasibly delivered to the homes of active-duty U.S service members and veterans.	RCT (Noninferiority)	Initial = 121; final = 82	Referred to the study by mental health care providers from outpatient mental health clinics as well as by self-referral (Flyers were placed in common areas around the hospital facilities). VA patients were offered financial compensation.	IV = in office vs at-home BATD treatment. Outcome measure. The author provides as narrative overview of a safety session checklist employed for the TBH encounters. Safety session checklist: Was designed and employed to collect information for the evaluation of TBH sessions. It captured current suicidal ideation, homicidal ideation, and signs of intoxication, disorientation and severe emotional dysregulation. It	DV = Beck Hopelessness Scale, Beck Depression Inventory, obtained at baseline, at 4 weeks of treatment, at 8 weeks of treatment, and 3 months post-treatment. The safety session checklist triggered one emergency protocol activation for an active duty service member to confide suicidal ideation resulting in the service member being evaluated in the emergency department. The checklist also reported connectivity issues with 50% of the TBH sessions with an inability to maintain a webcam	Linear mixed-effect regression models to evaluate primary outcomes and secondary outcomes. Non-Inferiority analysis of BHS & BDI-II scores at baseline, midpoint (4 weeks of treatment) and completion (8 weeks of treatment) of BATD treatment and at a 3-month post treatment follow-up.	At post treatment, participants in the in-person group had an average reduction of 6.21 points on the BHS (95% CI _ _7.38, _5.05) and 17.63 points on the BDI-II (95% CI _ _20.21, _15.06). Participants in the in-home group had an average reduction of 3.91 points on the BHS (95% CI _ _5.25, _2.57) and 13.40 points on the BDI-II (95% CI _ _16.36, _10.44). For both outcomes, the magnitude of decrease over time was less pronounced for the in-home group compared to the in-person group. The use of standardized metrics is recommended to standardize data collected by clinics across the MHS including clinical outcomes, patient satisfaction, preferences for TBH care. The results provide useful information about the technical and logistical	First RCT for TBH exclusive to military and veteran populations. Provide valuable information about the safety and feasibility of TBH in the MHS setting. The benefits of home-based care also extend to family members and other caregivers who may otherwise share the financial burden and inconvenience of assisting with travel to health care services. TBH has the potential to increase access to care for a population that has a well-documented history of low treatment-seeking behavior and other barriers to overcome.	Sample size was insufficient, restrictive inclusion/exclusion criteria. Author failed to reject the null.	Strength level I, low quality	Luxton, D. D., Pruitt, L. D., Wagner, A., Smolenski, D. J., Jenkins-Guarnieri, M. A., & Gahm, G. (2016). Home-based telebehavioral health for U.S. military personnel and veterans with depression: A randomized controlled trial. Journal of Consulting and Clinical Psychology, 84(11), 923-934. doi:10.1037/ccp0000135

					also captured data about the patient's home environment, such as who is in the home and is the environment safe and private. The tool also documented equipment and network connectivity status, lighting and disruptions to assess technical feasibility.	20% of the time resulting in transition to an over the phone session. Technical problems were not associated with changes in primary outcomes (BATD)		feasibility of TBH in the military setting. The MHS relies on using secured networks to protect government information systems. Given these considerations further implementation should assess compatibility with personally owned devices. Additionally, to further increase access, include appointment windows outside of the standard 0800-1500 M-F schedule.				
Vis et al. (2018)	There is a lack of comprehensive overview of determinants of practice and the authors systematically reviewed the literature. The objective of the article is to identify determinants of practice relevant to implementing eMH for mood disorders in routine practice. **Research question:** "What determinants of practice are identified as relevant to implementing eMH interventions for mood disorders in routine practice?"	Systematic Review	13,147 articles screened; 48 studies included in the review.	Broad search strategy with high sensitivity to four key terms: implementation, mental health care practice, mood disorder, eMental-Health. No time frame was applied. Benchmark definitions and search strings were created. Databases searched: PubMed, PsychINFO, and EMBASE. Specific inclusion and exclusion criteria are stated in the article.	IV = implementation of eMH for mood disorders in routine practice-not conducted by the authors, but the articles they reviewed needed to include an eMH intervention.	DV = common/recurring determinants of practice-based on systematic review of the literature.	Utilization of the **RE-AIM** framework. Thematic analysis applied to identify the recurrent and most important determinants to implementing eMH in routine practice. No threshold for recurrence of certain themes applied. Reference manager software, a spreadsheet, and qualitative analysis software were used to organize and conduct the selection, data extraction, and data analysis.	Results: 37 determinants of practice relevant to implementing eMH in practice. *Six main themes emerged:* acceptance, appropriateness, engagement, **resources, work processes,** and **leadership**. Three determinants were reported most frequently: **acceptance of eMH** in terms of the expectations and preferences of patients and professionals; appropriateness of eMH in addressing the mental health disorder, and specifically, the therapeutic interactions **mediated by eMH; availability, stability, and reliability of required technologies.**	Broadly defined search terms to capture as much relevant literature. Utilized a standardized integrative approach (RE-AIM in conjunction with qualitative thematic analysis). A quality appraisal analysis was conducted due to the lack of empirical evidence verifying causality between determinants of practice and successful implementation of eMH. Review included a wide range of studies from observational studies to RCTs.	Evidence for supporting the determinants were descriptive in nature from observational studies. Heterogeneity of studies and absence of validated instruments to assess quality contributed to the inability to come to sensible conclusions about the quality of the evidence.	Strength level III	Vis, C., Mol, M., Kleiboer, A., Bührmann, L., Finch, T., Smit, J., & Riper, H. (2018). Improving implementation of mental health for mood disorders in routine practice: Systematic review of barriers and facilitating factors. *Journal of Medical Internet Research, 20*(3). https://doi.org/10.2196/mental.9769
Greenhalgh et al. (2017)	The authors "aimed to produce an evidence-based, theory-informed, but also accessible and usable framework that would enable those seeking to design, develop, implement, scale up, spread, and sustain technology-supported health or social care programs to identify and help address the key challenges in different domains and the interactions between them."	"2 parallel components: (1) secondary research (hermeneutic systematic review) to identify key domains, and (2) empirical case studies of technology implementation to explore, test, and refine these domains, followed by a synthesis phase, and peer review and refinement of the draft framework."	Primary research: 6 case studies. Secondary analysis: >7000 hits initially, but authors did not state the final number of articles included in the secondary analysis literature review.	Primary research: selected a diverse sample of case studies from 2 research programs: Virtual Online Consultations: Advantages and Limitations (VOCAL) and Studies in Co-creating Assisted Living Solutions (SCALS). Secondary research: articles describing technology implementation frameworks and their applications were eligible if they (1) studied a technology that was perceived as new by intended users, (2) aimed to improve service efficiency, or patient or client	N/A	N/A	Primary research: 6 diverse case studies; 400 hours ethnographic observation; 150 interviews; 200 documents; action research; hermeneutic analysis. Secondary research: iterative searching (ancestry and snowballing); progressive focusing from > 7000 "hits;" hermeneutic analysis. Data analysis of the empirical case studies were conducted in parallel with progress on the hermeneutic literature review	NASSS Framework - 7 key domains - condition or illness, the **technology**, the **value** proposition, the **adopter system (comprising professional staff,** patient, and lay caregivers), the organization(s), the wider (institutional and societal) context, and the interaction and mutual adaptation between all these domains over time.	NASSS developed systematically to fill gaps in technology implementation-adoption, non-adoption, and abandonment. Prospective and retrospective use of the framework. Peer review of the collected data.	NASSS cannot be applied in a formulaic way or used deterministically as a tool. Inability to determine which elements in the framework will be mission-critical or how the different elements will interact.	Strength level III; high/good quality	Greenhalgh, T., Wherton, J., Papoutsi, C., Lynch, J., Hughes, G., A'Court, C., Hinder, S., Fahy, N., Procter, R., & Shaw, S. (2017). Beyond adoption: A new framework for theorizing and evaluating non adoption, abandonment, and challenges to the scale-up, spread, and sustainability of health and care technologies. *Journal of Medical Internet Research, 19*(11). https://doi.org/10.2196/jmir.8775

				outcomes in health or social care; and (3) offered some kind of conceptual or theoretical framework.			and each influenced the other.					
Fletcher (2018)	Examine literature on video to home (TBH) delivery of mental health services to glean (1) comparative clinical effectiveness of TBH to in-person mental health treatment, (2) impact of TBH on treatment adherence, (3) patient and provider satisfaction with TBH, (4) cost effectiveness of TBH, and (5) clinical considerations for TBH use.	Systematic Review	Initial number of search results not indicated, included in the final review was 10 RCTs, 2 Open Trials	Select studies exclusively looking at mental health treatments delivered exclusively via TBH, studies of both psychotherapy and pharmacotherapy interventions targeting adults with any mental health condition, studies reporting on other relevant aspects of TBH delivery, including cost and feasibility. All studies published in English.	Delivery of TBH	Clinical efficacy, Dropout/Adherence, Cost Effectiveness, Patient Satisfaction, Provider Satisfaction, Clinical Considerations, Lessons Learned and Future Directions	No statistical analysis identified in the article. Sample size, intervention, type of control, attrition, and effect size compared to control metrics for all included treatment outcomes studies were highlighted. Results and recommendations were gathers through synthesis of literature review and provided in a narrative summary by the author.	Clinical Efficacy - All 10 RCTs reported significant improvements in outcomes for patients receiving treatment delivered via TBH and in-office. Treatment Adherence - Tentative evidence that TBH has the potential to increase treatment adherence, particularly when patients opt to receive their mental health care via TBH. Cost Effectiveness - Increases when patients use personal devices, otherwise cost are fairly comparable to traditional methods, for patients with a large travel burden, TBH has tremendous cost saving potential. Patient satisfaction - Patients of varying demographics and with a range of mental health disorders have expressed high rates of satisfaction with TBH. **Provider Satisfaction** - Some providers believe the TBH reinforces patient's avoidance behaviors, but some believe that TBH offers the ability to reduce avoidance behaviors over time. Some are concerned about the technical hassles and issues with TBH. A perception gap exists between providers and patients over quality of TBH services. Those providers with lack of experience with TBH to include formal education and training expressed higher rates of satisfaction, this may be a leading barrier to utilization. Clinical Considerations - Appropriate inclusion and exclusion of criteria for TBH use should be reviewed on a case by case basis to ensure safety, as well as account for ethical and effectiveness considerations.	Provided sampling and results data from studies reviewed. A gap in attitudes and perceptions of TBH services was indicated between providers and patients with patients reporting greater satisfaction with TBH services than providers. This demonstrates an opportunity to better access provider attitudes about utilizing TBH to better promote adherence to its offering as a therapeutic modality to patients experiencing barriers to access to care. The author makes the following recommendations to improve provider and patient satisfaction and sustain TBH services, based on the articles studied. Routinely offer TBH as an option for treatment delivery, allowing patient choice (i.e., in-person, TBH, hybrid/combination of in-person and TBH). Consider clinical expertise, training, and competency of the provider, as well as resources/features of either the parent- or originating-site, rather than specific patient exclusion criteria, when evaluating a patient's fit for receipt of care via TBH. Emphasize TBH use for patient populations that experience barriers to access mental healthcare. Develop a strategy for implementing TBH involving experienced facilitators. Create a community of practice (e.g., peer consultation	No statistical analysis was completed	Strength level III, good quality	Fletcher, T. L., Hogan, J. B., Keegan, F., Davis, M. L., Wassef, M., Day, S., & Lindsay, J. A. (2018). Recent advances in delivering mental health treatment via video to home. Current Psychiatry Reports, 20(8). doi:10.1007/s11920-018-0922-y

									network) with other TBH providers to stay up to date on relevant issues, procedures, and technology. Develop a risk management plan using telehealth patient safety recommendations from APA, ATA, and relevant research. Become familiar with available assistive technologies for patients with vision, hearing, and physical disabilities. Train and educate providers across mental health and medical disciplines about TBH benefits and utilization.			
Hilty (2020)	Identify competencies necessary for mobile technologies and an approach to define them. The goal was to identify behaviors (skills and competencies), make them measurable for implementation, and be able to assess learning outcomes, which are distinct from clinical treatment and service system outcomes. **Research question:** What skills are needed for clinicians and trainees to provide quality care via mHealth, have they been published, and how can they be made measurable and reproducible to teach and assess them?	6 stage scoping review; stages included: approach, identifying relevant strategies (search strategy), study selection, charting the data, considering the meaning of findings, and consultation for expert opinion.	Total of 1232 article results. 78 papers were eligible for full text review. 14 papers were directly related to the 4 key concept areas: (1) **competencies**, (2) mobile **technologies**, (3) telemedicine mode, and (4) health.	**Inclusion** criteria: articles consisted of the key words competencies, mobile technologies, telemedicine mode, and/or health. **Exclusion** criteria included key words used from a concept area in isolation, discussion of skills abstractly, outline or listing of what clinicians need without detail, and listing immeasurable behaviors.	N/A	N/A	According to the authors, a qualitative content analysis approach would have been used if there was more content, to make sense of the wealth of extracted data. A descriptive analytical method was used to summarize the process and content information of discussions with experts, in an effort to chart and summarize complex concepts in a meaningful way. Case examples were used to describe the findings. A descriptive numerical summary of results and a thematic analysis were not possible.	A framework for mobile technology competencies was built according to the review, expert consensus, and recommendations of the IOM. This framework borrows from existing competency framework domains in telepsychiatry and social media. Competencies include the following: **institutional culture, technology instruction/assistance, pre-existing tech experience/attitudes, learning and teaching environment, teamwork and collaboration, interprofessional education,** interface with medical expertise, evaluation/quality improvement, teacher and teaching perspectives, **clinicians' attitudes, skills, knowledge**, and **technology** hardware and equipment.	Disagreement on articles for inclusion were reviewed by a 3rd reviewer.	Post Hoc article inclusion and exclusion criteria not selected. Study selection was based on guidance from a team of 2 reviewers, which was not interdisciplinary, and without a transparent and replicable process. A data charting form was not developed and used to extract data from each study. The analysis phase was not broken down into systematic steps (doing so would have been more rigorous and provided a guide for future researchers). Only thematic analysis was presented, rather than a numerical analysis. This review needed broader input for consensus (on collected information) across organizations.	Strength level V, high quality	Hilty, D., Chan, S., Torous, J., Luo, J., & Boland, R. (2020). A framework for competencies for the use of mobile technologies in psychiatry and medicine: Scoping review. JMIR MHealth and UHealth, 8(2). https://doi.org/10.2196/12229

Appendix C

Business Case Analysis

BUSINESS CASE with VALUE BASED CARE ASSESSMENT

Proposed Title for Project/Initiative/Opportunity to Improve

Implementation of a Tele-Behavioral Health Program Evaluation Checklist

Opportunity Statement *(Description of proposed project/initiative/opportunity to improve)*

Currently there is no internal tele-behavioral health (TBH) program evaluation process at Fort Hood or military wide. In the current state, the military health system (MHS) TBH program is not extensive enough to meet the care needs of the warfighter and beneficiaries. In 2017, over 20,000 TBH visits were purchased to fulfill treatment needs. The need to expand TBH services has been identified as a top priority by the MHS and will require a precision acquisition of resources to meet congressional mandates. To ensure expansion of TBH services aligns with industry standards, addresses existing gaps, and provides the highest quality care, an evaluation solution must become standardized to ensure the desired end state is met (Department of Defense, 2018). This project constitutes the development and implementation of an evidence-based program evaluation approach/checklist to TBH at Ft Hood clinics implementing TBH.

Business Opportunity/Objectives *(Prioritize listing – macro and micro objectives)*

MACRO Objectives

Contribute to expanded access to care - leverage TBH to improve access to quality care for MHS beneficiaries.
Contribute to enhanced TBH use for the support of the warfighter
Support treatment of population specific behavioral health needs
Contribute to the fulfillment MHS Virtual Health Strategic Plan Initiatives
Contribute to the de-stigmatization of behavioral health care utilization
Contribute to decrease service member suicide rates
MICRO Objectives

Develop an evidence-based program evaluation approach/checklist to support standardization of TBH services and delivery of care.
Conduct TBH program evaluation at Ft Hood clinics implementing TBH.
Produce TBH program evaluation results to be used as a guide to scale up and implement across multiple military sites

Potential Impact of the Initiative/Project *(Identify outcome metrics & benchmarks/and how objectives align with Quadruple Aim, Value Based Care, and HRO goals)*

Readiness
Improve deployability and medical force readiness:
Improved access to care for uniformed personnel.

Better Health
Encourage healthy behaviors:
Reduce stigma through enhancement of alternative TBH care access.
Increase and encourage treatment seeking behavior through improved TBH access (Health.mil, n.d.).
Better Care
Optimize and standardize access and improve condition-based care:
Utilize TBH to fullest extent to reduce wait times for appointments and maximize access to high quality, evidence-based care.
Standardize the delivery of TBH care via a program evaluation approach/checklist implementation.
Align TBH capabilities with commonly treated conditions and population needs (Department of Defense 2018).

Lower Cost
Improve effectiveness and efficiency:
Identify cost reduction opportunities through conducting TBH program evaluation.
Contribute to recapture purchased TBH care, which totaled more than $1.7M in 2017 alone (Department of Defense, 2018).
Maximize efficiencies in sustainment of technologies, workflows and business processes.

Improve efficiency of TBH services through program standardization.

Alternatives (courses of action) chosen for Analysis

1. Development and implementation of TBH program evaluation approach/checklist.
2. Standup Virtual Health Hub: TBH champion team to support sites within the hub network (academic detailing).
3. *"Status Quo"*: No TBH program evaluation and react as needed to address issues as they arise.

Analysis of Alternatives

Alternative 1:	Development and implementation of TBH program evaluation approach/checklist.

Pros	Cons
No cost to local MTF. Establishes a systematic, standardized evaluation approach applicable to all facilities delivering TBH services at Fort Hood providing the evaluators and opportunity to quantify effectiveness of the TBH program. Improve consistent delivery of TBH services to patients. Fulfills congressional mandate that aligns with MHS Virtual Health Strategic Plan Initiatives for 2021.	Resistance and limited organizational support for change. Status quo complacency.

Alternative 2:	Standup Virtual Health Hub: TBH champion team to support sites within the hub network (academic detailing)

Pros	Cons
TBH education from subject matter experts. Help build leadership buy-in. Improve program efficiency and help control costs.	Additional funds, training, and resources needed for the TBH champion team. May be assigned as an additional duty and over-extend the individual. May have difficulty in finding a full team educated and competent in TBH. Implementation of academic detailing is not yet standardized making the evaluation of its effectiveness difficult to measure (Yeh et al., 2016).

Alternative 3:	*"Status Quo"*: No TBH program evaluation and react as needed to address issues as they arise.

Pros	Cons
No compromise of provider confidence due to change in operations or provider resistance to TBH evaluation. No change in local or regional TBH policy or procedures. No directly associated costs or allocation of resources to perform a TBH evaluation.	No solution is provided to assess effectiveness of TBH programs. Compromised ability to meet beneficiary needs. Lack of standardization and inconsistencies in delivery of TBH services. No timeline in place to get a solution. Does not fix the problem.

Assumptions

Based on current literature, metrics used to evaluate TBH program implementation and structural and process outcomes converge into three main categories: organizational infrastructure to support TBH use, technology facilitating its use, and provider readiness and preparedness.
Organization
organizational support, policies/SOPs, organizational priorities and performance indicators
Technology
infrastructure, interoperability, end-user operability
Provider
competency, training, attitude/intent to use

With respect to the context and characteristics of TBH visits, we make the following assumptions:

All clinics have an operating TBH program with fully operable IT infrastructure and trained providers.
The direct care network has the capacity to staff all active duty service members TBH encounters.
Through expansionary efforts, the direct care network will have the capacity to support adult beneficiary care TBH encounters.

The average length of direct care and purchased care TBH visit are 30 minutes in length.
Purchased care visits are staffed by evenly distributed provider skill types (i.e. social workers, therapists, psychologists, psychiatrists, and psychiatric mental health nurse practitioners).

Recommendation and Rationale

Recommendation

Alternative 1: Pursue our solution of an evidence based TBH program evaluation approach/checklist that aligns with the MHS Virtual Health Strategic Plan.

Rationale

The current pandemic rapidly launched the wide-spread implementation of TBH services at Fort Hood. However, this quick transition from traditional face-to-face behavioral health encounters to TBH left little time for adequate TBH training, standardization, and evaluation. Our low cost, evidence based TBH program evaluation solution will align with MHS standards and possess the potential to streamline TBH delivery and expansion that meets the needs of the warfighter and beneficiaries.

Operating Budget Supporting Project/Initiative *(forecasted)(all figures are based on prior budget analytics and hypothetical operating expenses)*

Volume projection based on: 100% recapture of adult purchased care TBH encounters

Number of AD SM purchased TBH visits annually	943
Number of adult (non-AD) beneficiary purchased TBH visits annually	10,988
Total	**11,931**

Purchased care visits in FY17 broken down by beneficiary demographic.
(Department of Defense, 2018)

Reimbursement calculated for: Average cost of purchased TBH encounter

AD SM purchased TBH care	$127.38
Adult (non-AD) beneficiary purchased TBH care	$69.52

Average expense per visit paid in FY17.
(Department of Defense, 2018)

. Costs:

Variable Costs:

Supplies (deployment, training, turnover)	$5
Evaluation solution	$0
Total	**$5**

Highly variable between organizations due to mission requirements. Estimated no additional expense to maintain the project.

Fixed Costs:

Labor (30 min average provider compensation)	$35
Overhead (Use of facility, electricity, comms, maintenance)	$10
Total	**$45**

Estimated labor expenses based on assumptions of how encounters are staffed.
(U.S. Bureau of Labor Statistics, 2020)

. Forecasted P&L statement:

Revenues:

AD SM visit recapture per visit	$77.38
Adult (non-AD) beneficiary recapture per visit	$19.52

Total revenues	**$19.52-77.38/visit**	Estimated dollar per visit recapture into the direct care network, broken down by beneficiary demographic.
Costs:		
Variable costs	$5	Estimate based on current operating expenses. Analysis does not account for the cost of acquisition of additional resources per outlined assumptions.
Fixed costs	$45	
Total costs	**$50**	

PROJECTED PROFIT [savings] ***$ 72,969.34 if all AD encounters recaptured in direct care network; $214,485.76 if all other adult beneficiaries recaptured into the direct care network, $287,545 if all adult encounters recaptured***

Risks and Mitigation Plan

Risks by category	**Plan** (risks in **blue**/plan in **black**)
Human barriers	Communication about the evaluation, stakeholder knowledge about evaluation. Evaluators should include program staff and keep them informed during the evaluation process. Attend staff and key leadership meetings often and regularly. Past bad experiences with evaluation, personality of stakeholders, relationship building and interpersonal skills of evaluators, negative attitudes of staff toward evaluation. Evaluators should build relationships with program staff, thereby enhancing mutual trust and understanding. Make TBH program evaluation expectations and priorities clear to stakeholders. Threat of negative results, changing existing power structure. High level of communication and knowledge about the evaluation increases predictability; therefore, less threat, more trust, higher motivation to cooperate (Taut & Brauns, 2003). Results will be aggregated to mitigate privacy or reprisal concerns.
Contextual/organizational barriers	Political structures, decisions, mandates; organizational hierarchical structures.

	Coordinate and communicate TBH program evaluation solution to all levels of leadership within the organization to facilitate buy-in from key personnel (Greenhalgh et al., 2017). Staff turnover. Educate all new staff on TBH program evaluation initiative and plan. Evaluator context knowledge. Understand current state of Fort Hood TBH program. Align TBH program evaluation approach with Fort Hood mission, vision, and TBH initiatives. Ongoing and regular meetings with Fort Hood stakeholders to maintain relationships and understand current context of the TBH program. Non-compliance/resistance to implementation of program evaluation recommendations. Facilitate implementation through collaboration with local facility TBH coordinator to create a culture change that promotes use of TBH. Embrace a community of practice to remain up to date on relevant issues, procedures and technology (Fletcher et al., 2018).
Evaluation barriers	Participation and information of staff. Allow staff protected time to facilitate their participation in this program evaluation and learn about TBH practices and policies in order to build user confidence (Interian et al., 2018). Good methods and meaningful data; justifiable and context-specific criteria/conclusions; context sensitivity of evaluation design. Develop an evidence-based program evaluation checklist to evaluate the effectiveness of the TBH program at Fort Hood. Checklist will also align with military specific requirements outlined in the MHS Virtual Health Strategic Plan Initiatives, DHA virtual health requirements, and current Fort Hood TBH policies and procedures. Gaining access to data. Collaborate with key leaders for access to data pertinent to a comprehensive TBH program evaluation. Competence of the evaluators. Be well-versed, confident, and knowledgeable about TBH, the execution of a program evaluation, and data collection. Each evaluator (MAJ Canada and CPT Feltman) will evaluate based on the evidence-based program evaluation checklist independently, but discuss any discrepancies to reach a consensus.
Sustainability of program evaluation recommendations	Provide a handbook to Fort Hood key leadership and stakeholders outlining resources to help improve, maintain, and/or sustain their TBH program (dependent on findings from the program evaluation).

Implementation Plan-Model for Evidence-Based Practice Change

Phase 1:	**Assess** the current TBH program at Fort Hood and **link** the problem to potential interventions and outcomes.
Milestone Description:	Communication with Fort Hood stakeholders to determine current state of their TBH program. Conduct literature search and review for identification of evidence-based criteria to include in a program evaluation checklist.

Deliverables	Due Date	Accountable Person
Initiate and maintain regular contact with Fort Hood key stakeholders. Review the literature for evidence to support the	Ongoing process in maintaining relationships with Fort Hood key stakeholders and keeping up to date with our literature review.	MAJ Canada CPT Feltman Fort Hood key stakeholders

development of a TBH program evaluation approach/checklist.		

Resources Needed
Identification of Fort Hood key stakeholders and contact information. Access to Fort Hood TBH policies/SOPs and other documents to provide a comprehensive understanding of the current state of the Fort Hood TBH program.

Expected Level of Benefit
Maintaining regular contact with Fort Hood key stakeholders will foster collaboration and relationships, encourage leadership buy-in and facilitate the implementation of the program evaluation checklist. Additionally, information gathered from meetings and our literature search will ensure the checklist is evidence-based and meets Fort Hood TBH needs and objectives.

Phase 2:	**Synthesize** the evidence and contextual information and **design** the program evaluation approach/checklist.
Milestone Description:	Synthesis of evidence-based metrics to be used, benchmarks to be met, and best practices for a TBH program evaluation approach that are contextually appropriate to Fort Hood. This information will provide the foundation for the development and design of the TBH program evaluation checklist.

Deliverables	Due Dates	Accountable Person
Development and design of an evidence based TBH specific program evaluation checklist along with data analysis plan	To be completed NLT MAR 2021	MAJ Canada CPT Feltman

Resources Needed
Criteria for program evaluation checklist based on the evidence and literature review: 1. Organization organizational support, policies/SOPs, organizational priorities and performance indicators 2. Technology infrastructure, interoperability, end-user operability 3. Provider competency, training, attitude/intent to use The references below are also used as resources to ensure the checklist is consistent with local and DoD TBH requirements: MHS Virtual Health Strategic Plan Initiatives DHA virtual health requirements Current Fort Hood TBH policies and procedures

Expected Level of Benefit
Identification and development of an evidence-based program evaluation checklist can facilitate the standardization of a TBH program, thus improving its efficacy evidenced by increased access to care and decreased network referred costs.

Phase 3:	Program evaluation **implementation** and data collection.
Milestone Description:	This phase would be described as the baseline assessment and identification of deficiencies/strengths of the TBH program at each Fort Hood clinic utilizing TBH services.

Deliverables	Due Dates	Accountable Person
Implementation and execution of TBH program evaluation at all clinics utilizing TBH at Fort Hood.	To be completed NLT 3 months post arrival to Fort Hood.	MAJ Canada CPT Feltman

Resources Needed
Evidence-based TBH program evaluation approach/checklist, data analysis plan, USU survey team (MAJ Canada and CPT Feltman), and supporting clinic staff and leadership.

Expected Level of Benefit
This phase can identify both the strengths and areas that need improvement relative to DoD/Congressional mandates and the evidence-based program evaluation checklist. The results of this survey will help identify deficiencies and changes necessary to achieve a more efficient TBH program.

Phase 4:	**Evaluate** findings and analyze data from program evaluation.
Milestone Description:	During this phase, data is collected, logged into a secured digital database, evaluated, and identified statistical tests are applied.

Deliverables	Due Dates	Accountable Person
Identification of areas of strength and weakness among each individual clinic and for the TBH program as a whole at Fort Hood.	To be completed NLT two months post data collection.	MAJ Canada CPT Feltman

Resources Needed
TBH program evaluation approach/checklist, data analysis plan, USU survey team (MAJ Canada and CPT Feltman), and supporting clinic staff and leadership. SPSS software for data analysis.

Expected Level of Benefit
Provides tangible data to begin assessing the needs of the organization.

Phase 5:	**Integrate** and **maintain** findings and recommendations. Disseminate program evaluation findings to key stakeholders and leaders. Presentation of recommendations disseminated to key stakeholders and leaders.
Milestone Description:	During this phase, the collected and analyzed data along with future recommendations for enhancement of TBH use are synthesized and presented to key stakeholders. After distributing findings from the program evaluation to key leaders, recommendations for improvement and sustainment will be presented.

Deliverables	Due Dates	Accountable Person
Poster/PPT presentation of findings and recommendations to key stakeholders, leaders, staff at Fort Hood. Development and dissemination of resource recommendation handbook with key ingredients/resources for TBH program success.	NLT 1 month post data analysis.	MAJ Canada CPT Feltman Implementing these recommendations is a team effort and requires involvement from everyone in the system, not just the USU evaluation team. However, overall accountability and sustainability of recommendations is incumbent upon the individual clinic commanders and leadership at Fort Hood.

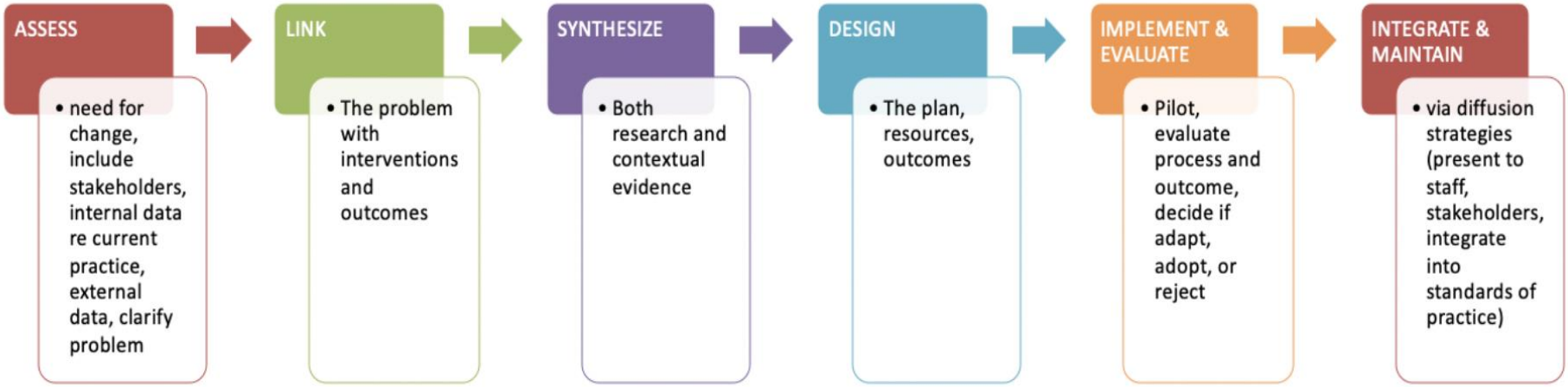
Resources Needed
Presentation technology and support operating software. Display materials.

Expected Level of Benefit
Stakeholders are made aware of key findings of evaluation as well as future recommendations for further improvement. This will help leaders prepare to sustain strengths and improve deficiencies identified through the evaluation process. Dissemination of findings and recommendations for max visibility of strengths and areas for improvement of current TBH program at Fort Hood. The development and distribution of a TBH resource handbook is expected to improve sustainability of recommendations.

NOTE: Modified from Harvard Business Review Press. (2011). *Pocket mentor: Developing a business case.* Boston: Author (pp 82-85).

Appendix D

Model for Evidence-Based Practice Change



Appendix E

Procedural Steps

Fort Hood DNP Project Timeline (Calendar) Year 1 (2020)												
Activity/Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Phase 1: Assess the current TBH program at Fort Hood and link the problem to potential interventions and outcomes.												
Task 1: Communication with Fort Hood stakeholders to determine current state of TBH program and identification of performance improvement opportunity.			X	X	X							
Task 2: TBH program evaluation approach research and literature review to support the development of a TBH program evaluation approach/checklist.				X	X	X	X	X				
Task 3: Ongoing stakeholder engagement meetings which will foster collaboration and relationships, encourage leadership buy-in and facilitate the implementation of the program evaluation approach/checklist.									X	X	X	
Phase 2: Synthesize the evidence and contextual information and design the program evaluation approach/checklist.												
Task 1: Synthesis of evidence-based metrics to be used, benchmarks to be met, and best practices for a TBH program evaluation approach/checklist that are contextually appropriate.					X	X						
Task 2: Design and develop program evaluation approach/checklist.						X	X	X	X	X		
Task 3: DNP project presentation to USU faculty, peers, and Fort Hood key stakeholders.											X	
Task 4: Finalization of project in preparation for IRB submission.											X	X

Fort Hood DNP Project Timeline (Calendar) Year 2 (2021)												
Activity/Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Phase 2 Continued: Synthesize the evidence and contextual information and design the program evaluation checklist.												
Task 5: USUHS VPR Submission and Approval.				X	X							
Task 6: Site IRB Submission and Approval.				X	X							
Task 7: Arrive at Fort Hood, Texas.				X	X							
Phase 3: Program evaluation implementation and data collection.												
Task 1: In-person brief to key stakeholders on DNP project purpose, expectations, and timeline.					X							

Task 2: Execute TBH program evaluation at clinics and log collected data into a secured digital database.						X	X					
Task 3: Monthly meeting with key stakeholders to update on program evaluation progress and status.						X	X	X	X	X	X	X
Task 4: Last month for data collection.											X	
Phase 4: Evaluate findings and analyze data from program evaluation.												
Task 1: Evaluate data and perform statistical testing.											X	X
Task 2: Based on the data evaluation and analysis, identify TBH program areas of strength and improvement.											X	X

Fort Hood DNP Project Timeline (Calendar) Year 1 (2022)												
Activity/Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Phase 4 Continued: Evaluate findings and analyze data from program evaluation.												
Task 2 cont.: Based on the data evaluation and analysis, identify TBH program areas of strength and improvement.	X											
Phase 5: Integrate and maintain findings and recommendations.												
Task 1: Development of resource recommendation handbook based on evaluation findings.	X	X										
Task 2: Dissemination and presentation of project findings and recommendations to Fort Hood key stakeholders.			X	X								
Task 3: Project Poster and PowerPoint presentation during USU research week.					X							
Task 4: GRADUATE!!					☺							
Task 5: Manuscript development and submission for journal publication.	X	X	X	X	X	X	X	X	X	X	X	X

Appendix F

Data Analysis Table

DATA ANALYSIS TABLE

		Variable Name	Variable Description and type of measure	Data Source	Possible Range of Values	Level of Measurement	Time Frame for Collection	Statistical Test	Decision Rule
Event	**IV**	TBH program evaluation approach	*Process outcome* The program evaluation approach will consist of evidence-based primary and sub-domains necessary for program evaluation	Evidence appraisal from the literature Conducted at Fort Hood clinics that provide TBH services.	N/A	N/A	End of initiative	N/A	TBH program evaluation at all facilities/clinics at Fort Hood that provides TBH services (~100% [negotiable pending key leader feedback] evaluation of all clinics).
	DV	**Organization**							
		A1 Organizational support **A1.1** Culture that supports TBH-socially defined and agreed "ways of doing," including norms, habits, and roles (Greenhalgh et al., 2017; Hilty et al., 2020; Vis et al., 2018) **A1.2** Mechanisms, means, and contents of disseminating information across the mental health care organization to all clinics using TBH (Vis et al., 2018) **A1.3** Dedicated TBH specialists and support staff	**A1** *Process outcome* Organization support is the extent the clinic leadership and MTF directors support the sustainment of TBH services in all mental health clinics.	**A1** Identified organizational key leaders, stakeholders and decision-makers.	**A1** 0 = not present/met 1 = partially met with qual support 2 = present/met	**A1** 0, 1, 2 ordinal level The inclusion of a partially met box would require qualitative support in the comments box justifying selection.	**A1** End of initiative	**A1** Descriptive analysis; reporting proportions/percentages; graph schematics to visualize descriptive data	**A1** Reported as a percentage; number of items checked on the checklist/number of items on the checklist that are applicable to that unit. The end goal is to have as many checked items on the list as possible. Units with <70% need further evaluation to identify the weakest areas and formulate corrective action. General adherence rates >90% ideal and set as the goal for this

Event	**DV**	embedded within the clinics (Greenhalgh et al., 2017; Vis et al., 2018)							project (Ament, 2015)
		A2 Policies/SOPs **A2.1** All policies and SOPs easily accessible (electronic and/or hardcopies) to all staff (Vis et al., 2018). **A2.2** Emergency management of patients in distress policy (Glueckauf et al., 2018). A treatment session checklist with embedded emergency protocols should be standard (Luxton et al., 2016). **A2.3** TBH standards and clinical practice guidelines; specific credentialing and licensing policies (Vis et al., 2018) **A2.4** Legal and ethical policies (Greenhalgh et al., 2017) **A2.5** Specific TBH program rollout/deployment and delivery of care policy or procedures (Greenhalgh et al., 2017; Vis et al., 2018)	**A2** *Structure outcome* Policies are written, command approved instructions that guide the practice to TBH in the MTF.	**A2** Same as A1	**A2** Same as A1	**A2** Same as A1	**A2** Same as A1	**A2** Same as A1	**A2** Same as A1

Event	**DV**	**A3 Organizational priorities and performance indicators** **A3.1** Clear vision, mission, priorities, clinical and process measures, and work plans (Vis et al., 2018) **A3.2** Coherence in TBH agendas/priorities between higher echelon leadership and clinic leadership (Greenhalgh et al., 2017)	**A3** *Process outcome* Priorities defined by MTF and ancillary clinic directors and information disseminated to clinics and staff.	**A3** Same as A1	**A3** Same as A1	**A3** Same as A1	**A3** Same as A1	**A3** Same as A1	**A3** Same as A1
		B. Technology							
		B1 Infrastructure **B1.1** Computers, web cameras, bandwidth, speed, internet connection, computing, encryption capability (data security and patient safety), antivirus, anti-malware, and firewall software, and data storage software (APA, n.d.; Greenhalgh et al., 2017) **B1.2** Availability of offices, space, and relevant TBH equipment (Hilty et al., 2020; Vis et al., 2018). All clinic staff that may be required to perform TBH operations in a deployed setting should have the same TBH setup, operations and troubleshooting (Mishkind et al., 2013).	**B1** *Structure outcome* Infrastructure includes computers, web cameras, bandwidth internet connection, computing, encryption capability, and data storage software.	**B1** IT department, library personnel, clinic management/ leadership Chief of IT (CIO)	**B1** Same as A1	**B1** Same as A1	**B1** Same as A1	**B1** Same as A1	**B1** Same as A1

Event	**DV**	**B2 Interoperability** **B2.1** Systems compatible and cross communicate with each other (Vis et al., 2018) **B2.2** Single sign-on technology and intelligent portal design (Vis et al., 2018); 2 factor authentication (APA, n. d.)	**B2** *Structure outcome* Communication between systems.	**B2** Same as B1	**B2** Same as A1	**B2** Same as A1	**B2** Same as A1	**B2** Same as A1	**B2** Same as A1
		B3 End-user operability **B3.1** Access to IT experts to troubleshoot user issues (Vis et al., 2018) **B3.2** Clear instructions on how to access and utilize TBH system (Vis et al., 2018). **B3.3** Clinical workflow contingency plans for technology failures (e. g. if the camera doesn't work, move to phone call, if phone call isn't feasible, schedule face-to-face appt etc.) (Vis et al., 2018).	**B3** *Structure measure* Number of required operating systems required for a TBH appointment compared to a regular appointment. Interface between system and human.	**B3** Same as B1	**B3** Same as A1	**B3** Same as A1	**B3** Same as A1	**B3** Same as A1	**B3** Same as A1
		C. Provider							

Event	**DV**	**C1 Competency** **C1.1** Specific TBH competency checklist and assessment needed for every provider delivering TBH services (Hilty et al., 2020; Vis et al., 2018)	**C1** *Structure measure* Competencies guide the appraisal of provider performance against formal expectations established by national credentialing bodies and local command requirements. Competency standard/presence of checklist.	**C1** Clinicians providing TBH (PMHNP, FNP, psychologist, MD/DO)	**C1** Same as A1	**C1** Same as A1	**C1** Same as A1	**C1** Same as A1	**C1** Same as A1
		C2 Training **C2.1** Training modalities: formal education, credentialing, peer- group learning, high fidelity TBH simulation training (Fletcher et al., 2018; Hilty et al., 2020; Vis et al., 2018) **C2.2** Training content: Technical and therapeutic training, TBH benefits and utilization to routinely offer TBH to overcome patient barriers when assessed (Fletcher et al., 2018)	**C2** *Process measure* Training is the formal indoctrination process mandated by all providers prior to initiating TBH practice. Formal training done/not done; refresher training at the expiration of original training.	**C2** Same as C1	**C2** Same as A1	**C2** Same as A1	**C2** Same as A1	**C2** Same as A1	**C2** Same as A1
		C3 Attitude/Intent to use **C3.1** Valid and reliable instruments to measure factors influencing attitude and intent to use. For example, constructs from the Uniformed Theory of Acceptance and Use of Technology and the Technology Acceptance Model can be transformed	**C3** *Outcome measure* Attitudes include provider willingness to utilize TBH in practice and beliefs regarding the effectiveness of TBH as a therapeutic modality. The provider is comfortable, confident, and	**C3** Same as C1	**C3** Same as A1	**C3** Same as A1	**C3** Same as A1	**C3** Same as A1	**C3** Same as A1

Event	**DV**	into questionnaire format to measure provider attitude and intent to use TBH in their clinical practice (Harst et al., 2019) **C3.2** Experience with TBH technology (Hilty et al., 2020; Vis et al., 2018) **C3.3** TBH value and acceptance by staff and providers (Greenhalgh et al., 2017; Hilty et al., 2020; Vis et al., 2018), performance and effort expectancy, social influence, and facilitating conditions [UTAUT/TAM framework] (Harst et al., 2019)	knowledgeable of TBH operating systems						

Appendix G

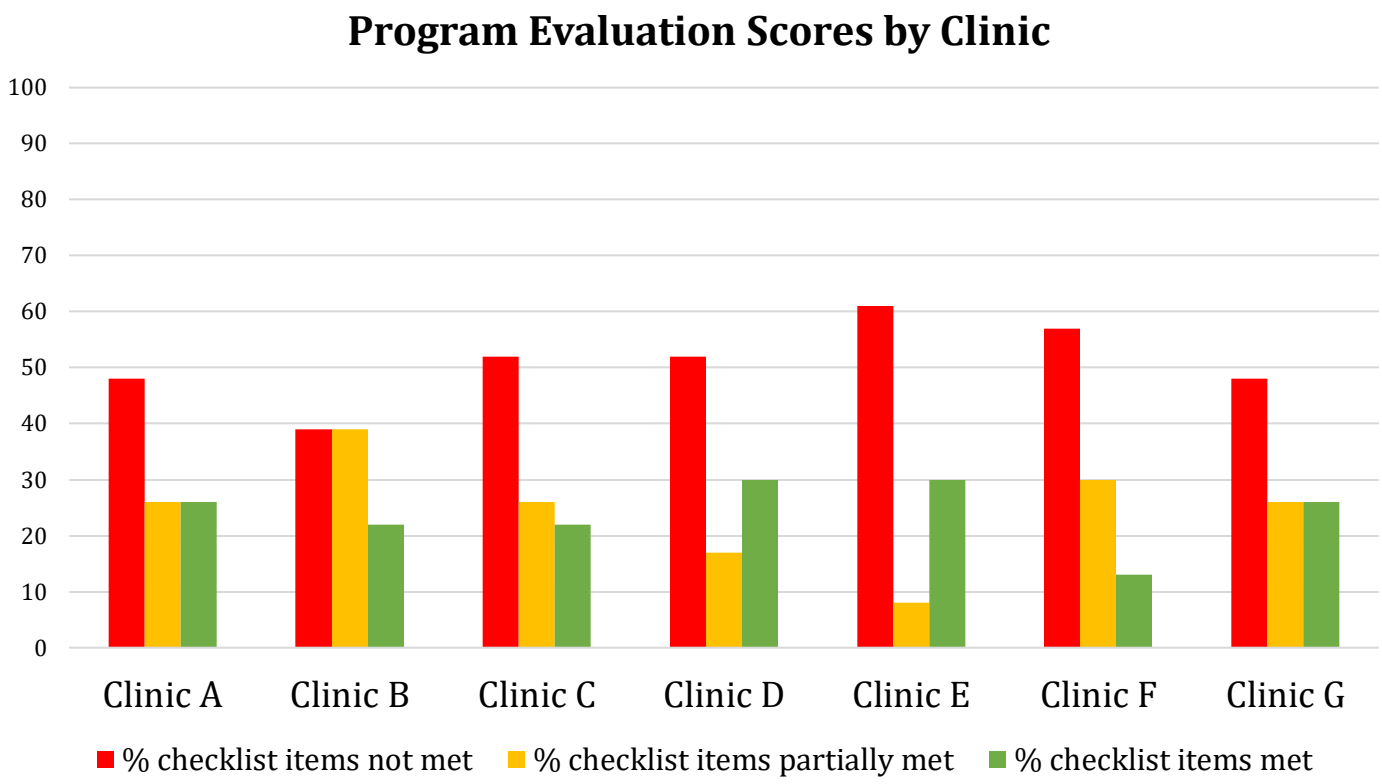
Program Evaluation Checklist

Program Evaluation Checklist

TBH Checklist		Outcome Level of Measurement	
Variable		#	*Comments*
A1.1	TBH use is supported in clinic culture.		
A1.2	TBH practice updates clearly disseminated		
A1.3	Available TBH support staff and resources		
A2.1	Policies and SOPs are readily accessible		
A2.2	Emergency management protocol available		
A2.3	Credentialing and associated CPGs available		
A2.4	Legal and ethics policy available		
A2.5	Policy and SOP for expansion of TBH available		
A3.1	Mission and vision clarify TBH priority		
A3.2	TBH priority emphasized in organization mission and vision		
B1.1	Infrastructure aligns with technologic and security standards		
B1.2	Physical space available and appropriate for TBH care		
B2.1	Infrastructure cross compatibility evident		
B2.2	Single sign on and two factor authentication present		
B3.1	IT support available		
B3.2	Clear user operability manual available		
B3.3	IT contingency plan available		
C1.1	Competency assessment available		
C2.1	Formal initial training and simulation in place		
C2.2	Provider educated to clinical indicators for TBH use		
C3.1	Instrument to measure factors influencing attitude and intent to use available		
C3.2	Providers have experience with TBH care delivery		
C3.3	TBH as a method of care delivery valued and accepted by providers		

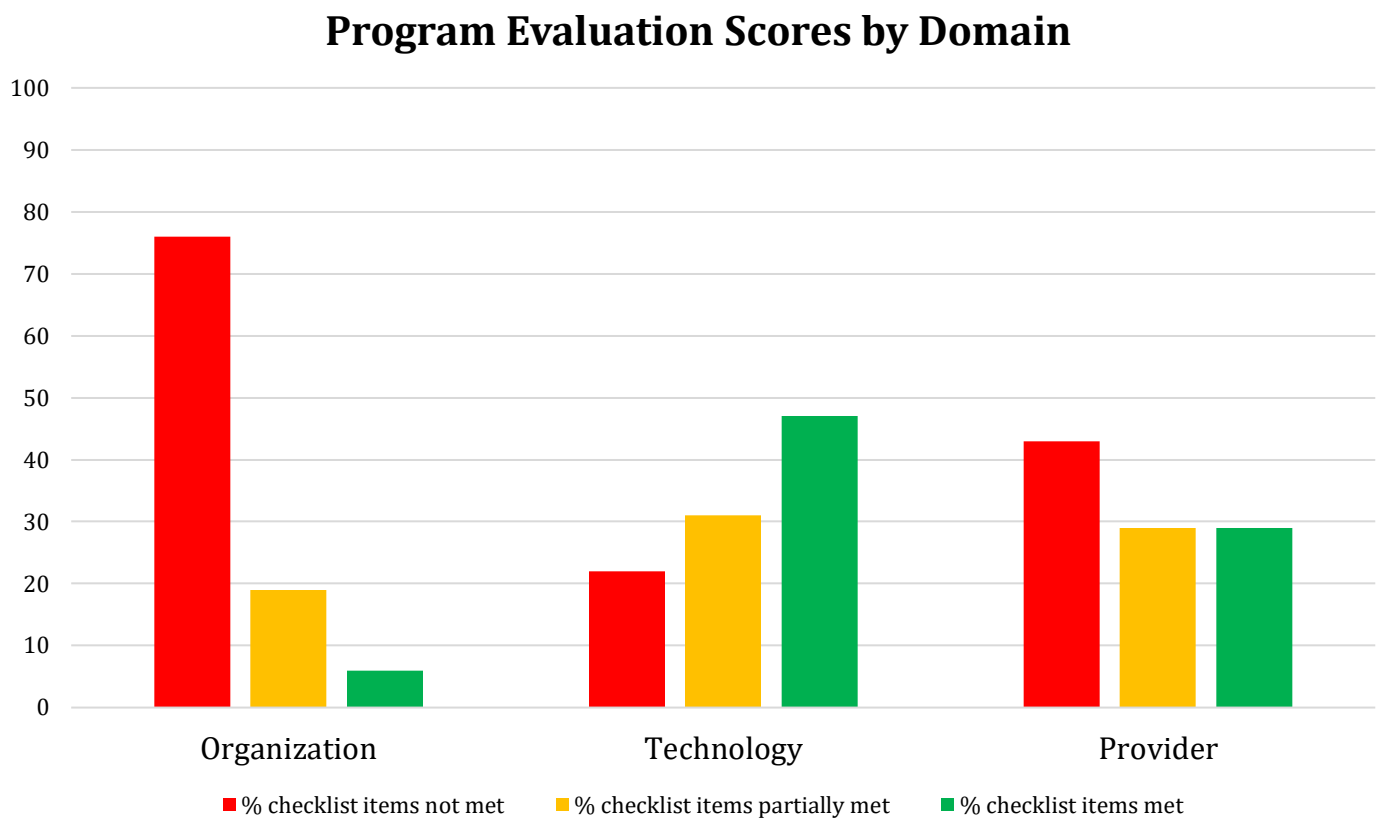
Appendix H

Program Evaluation Score by Clinic



Appendix I

Program Evaluation Score by Domain



Appendix J

Program Evaluation Score by Sub-domain

Section A

Section A1

Table 1

Questions section A1

A1.1	TBH use is supported in clinic culture.
A1.2	TBH practice updates clearly disseminated.
A1.3	Available TBH support staff and resources.

- For question A1.1, 2 clinics met criteria (28.6%) while only 1 (14.3%) did not meet the criteria. Across all of the questions in the A section total, this is the most with the criteria completely met.
- Only one clinic met critical for A1.2 while 3 did not.
- None of the clinics met critical for A1.3 and over half (4) did not meet the criteria.

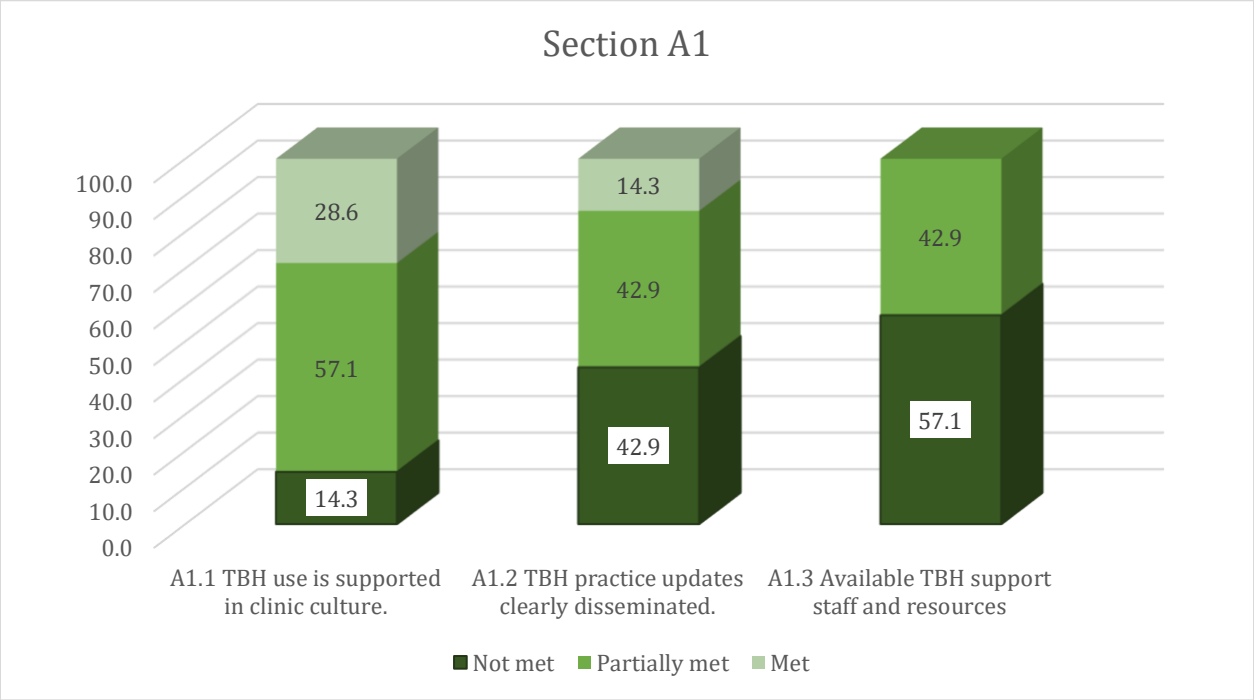


Figure 1. Results for section A1

Section A2

Table 2

Questions section A2

A2.1	Policies and SOPs are readily accessible.
A2.2	Emergency management protocol available.
A2.3	Credentialing and associated CPGs available.
A2.4	Legal and ethics policy available.
A2.5	Policy and SOP for expansion of TBH available.

- No clinics met the critical for questions A2.1, A2.3, A2.4, and A2.5.
- 3 clinics (42.9%) partially met A2.2 while 57.1% (4).

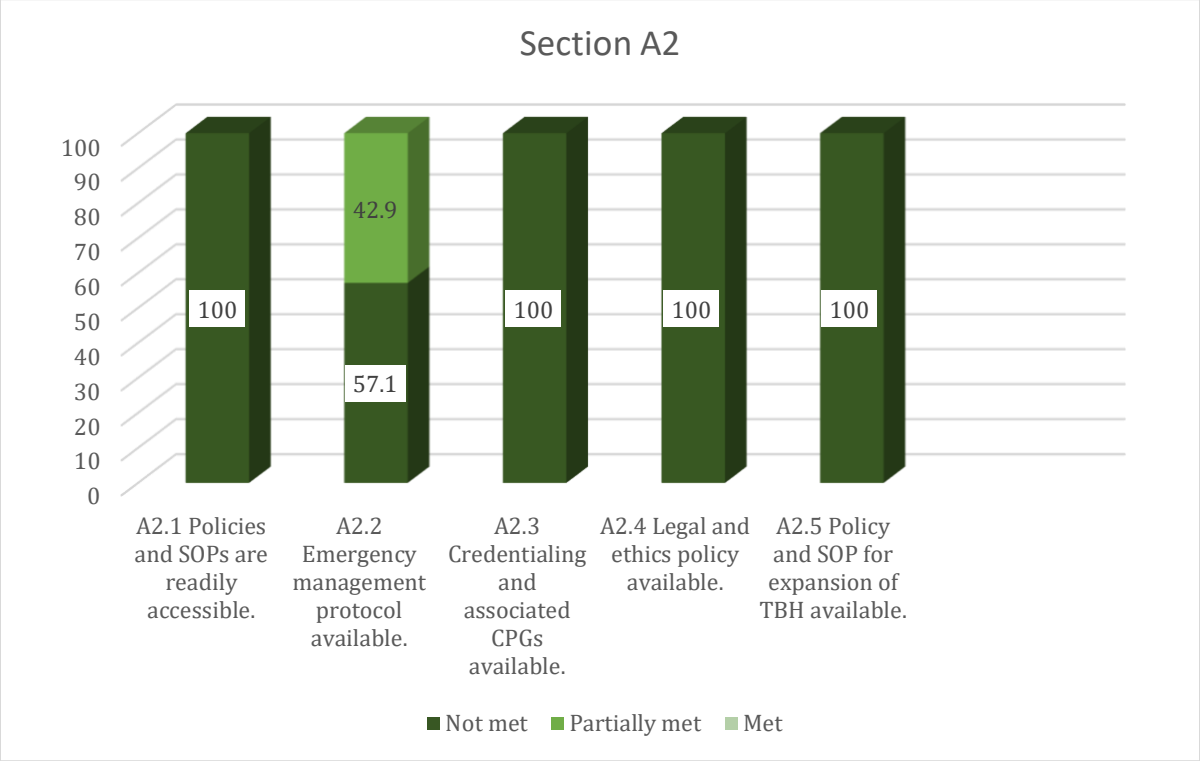


Figure 2. Results for section A2

Section A3

Table 3

Questions section A3

A3.1	Mission and vision clarifies TBH priority.
A3.2	TBH priority emphasized in organization mission and vision.

- None of the clinics had completed A3.1
- 1 clinic has met the criteria for A3.2, with 6 not having met it at all.

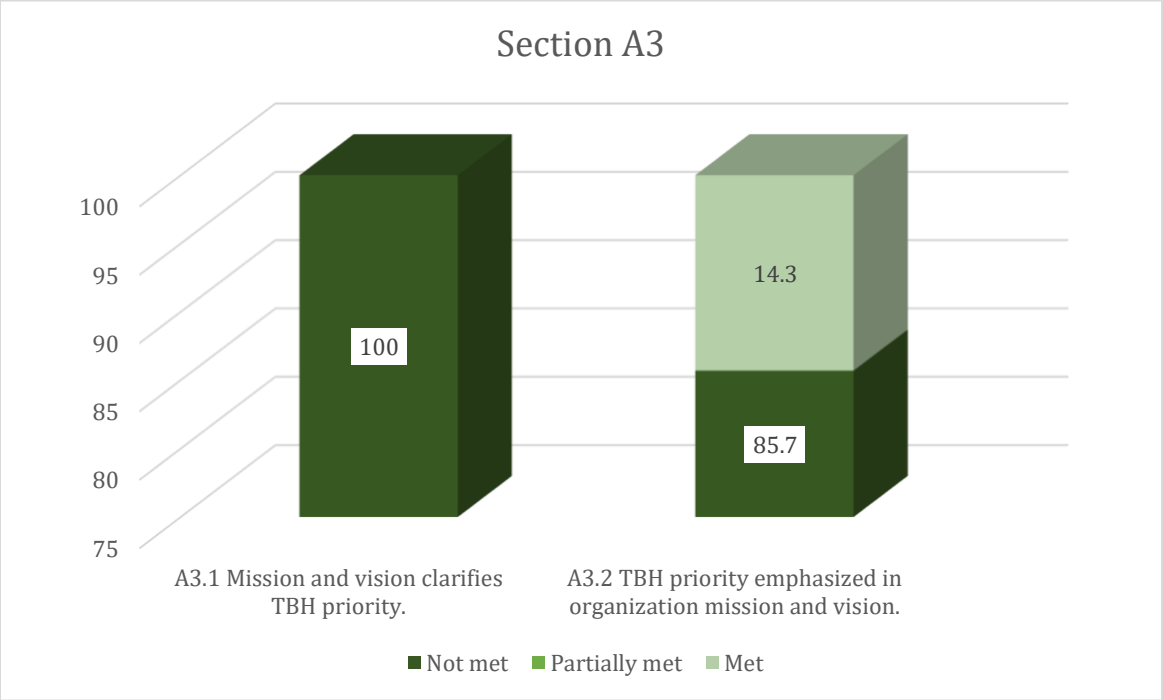


Figure 3. Results for section A3

Section B

Section B1

Table 4

Questions section B1

B1.1	Infrastructure aligns with technologic and security standards

B1.2	Physical space available and appropriate for TBH care.

- All of the clinics met the criteria for either of the B1 requirements

Section B2

Table 5

Questions section B2

B2.1	Infrastructure cross compatibility evident.
B2.2	Single-sign on and two factor authentication present

- All of the clinics partially met B2.1
- 2 clinics met B2.2 and 5 partially met it

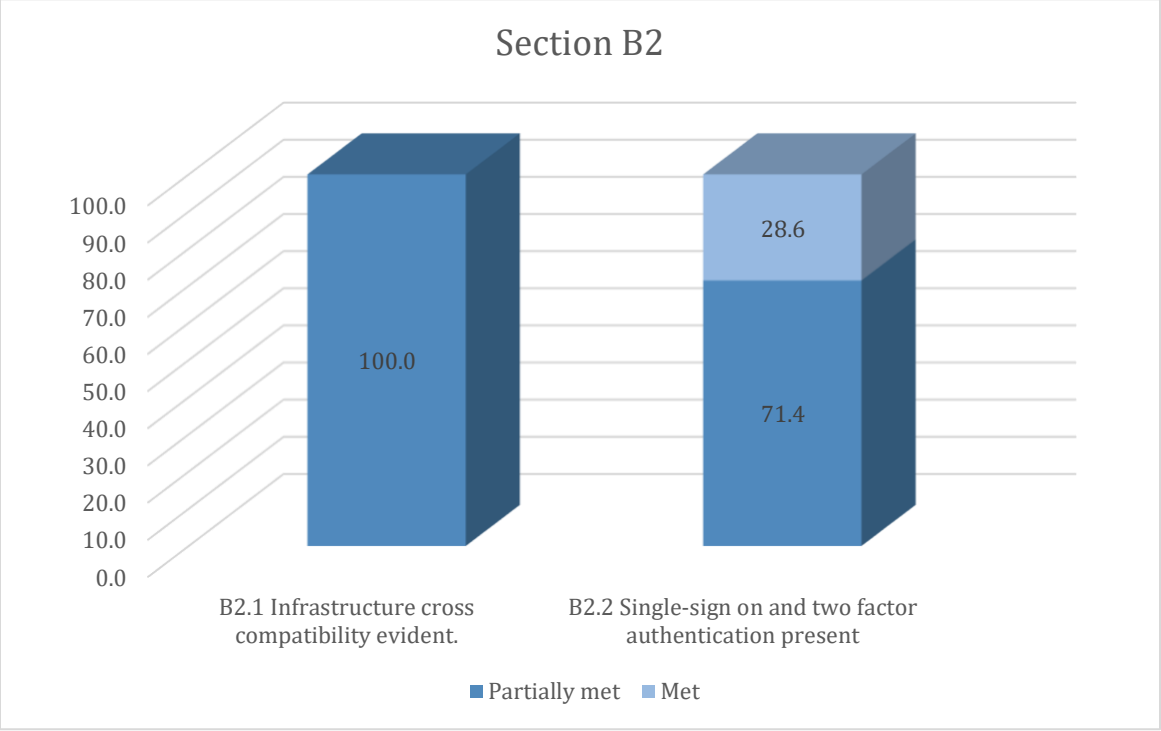


Figure 4. Results for section B2

Section B3

Table 6

Questions section B3

B3.1	IT support available.
B3.2	Clear user operability manual available.
B3.3	IT contingency plan available.

- All clinics met B3.1
- Most clinics did not meet B3.2 (6, 85.%)
- 71% (5) did not meet B3.3 while 2 (28.6%) partially met this criterion

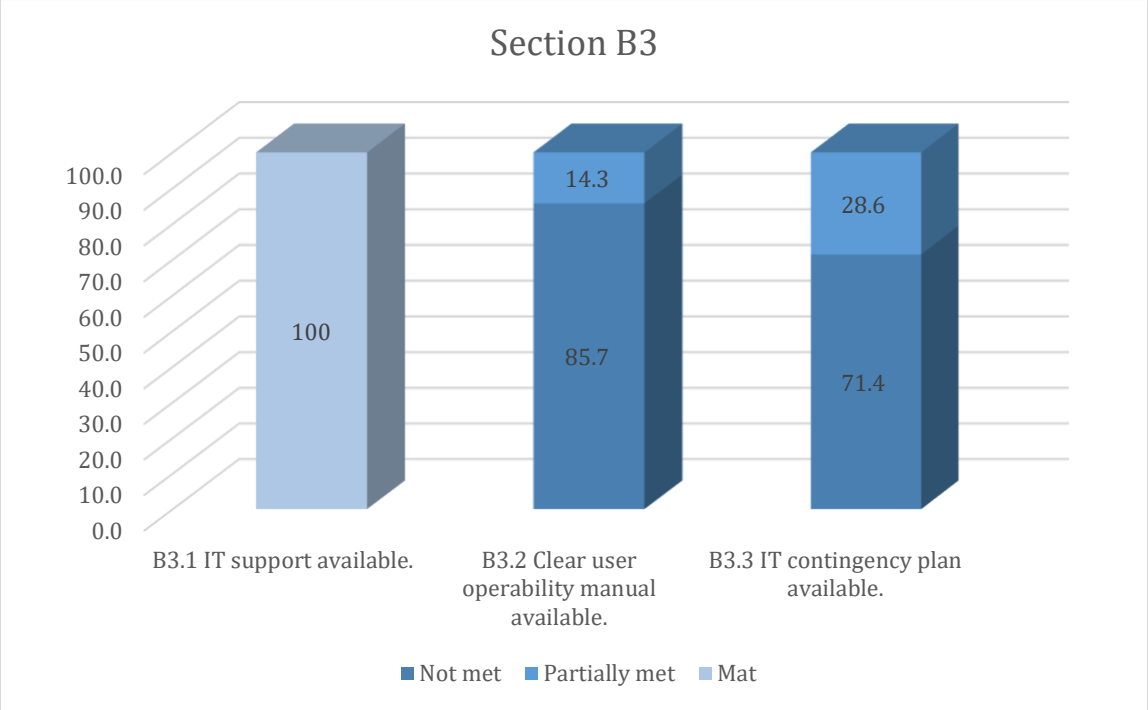


Figure 5. Results for section B3

Section C

Section C1

Table 7

Questions section C1

C1.1	TBH competency assessment available

- None of the clinics met C1.1

Section C2

Table 8

Questions section C2

C2.1	Formal initial training and simulation in place.
C2.2	Provider educated to clinical indicators for TBH use.

- For C2.1 the majority of partially clinics met the requirements (71.4%, 5) and 2 clinics did not
- For C2.2, 71.4% (5) clinics met the criteria and 2 did not.

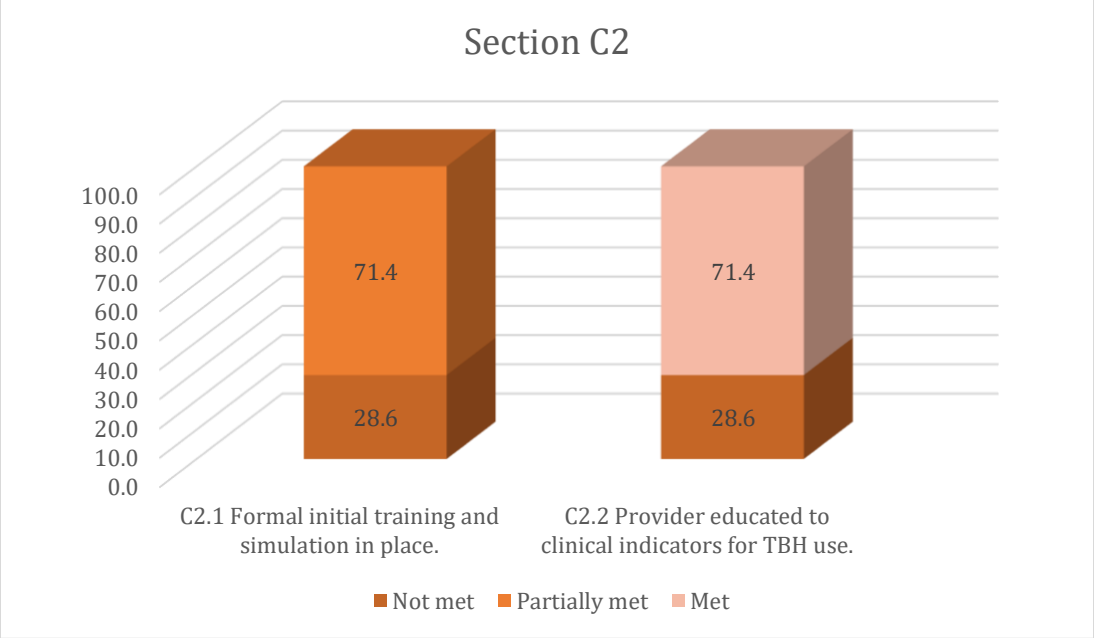


Figure 6. Results for section C2

Section C3

Table 9

Questions section C3

C3.1	Instrument to measure factors influencing attitude and intent to use available TBH services.
C3.2	Providers have experience with delivery of care via TBH.
C3.3	TBH as a method of care delivery valued and accepted by providers.

- For C3.1 – none of the clinics met this criterion
- For both C3.2 and C3.3, a significant number met the criteria with 57.1% (4) meeting it for C3.2 and 42.9% (3) meeting it for C3.3

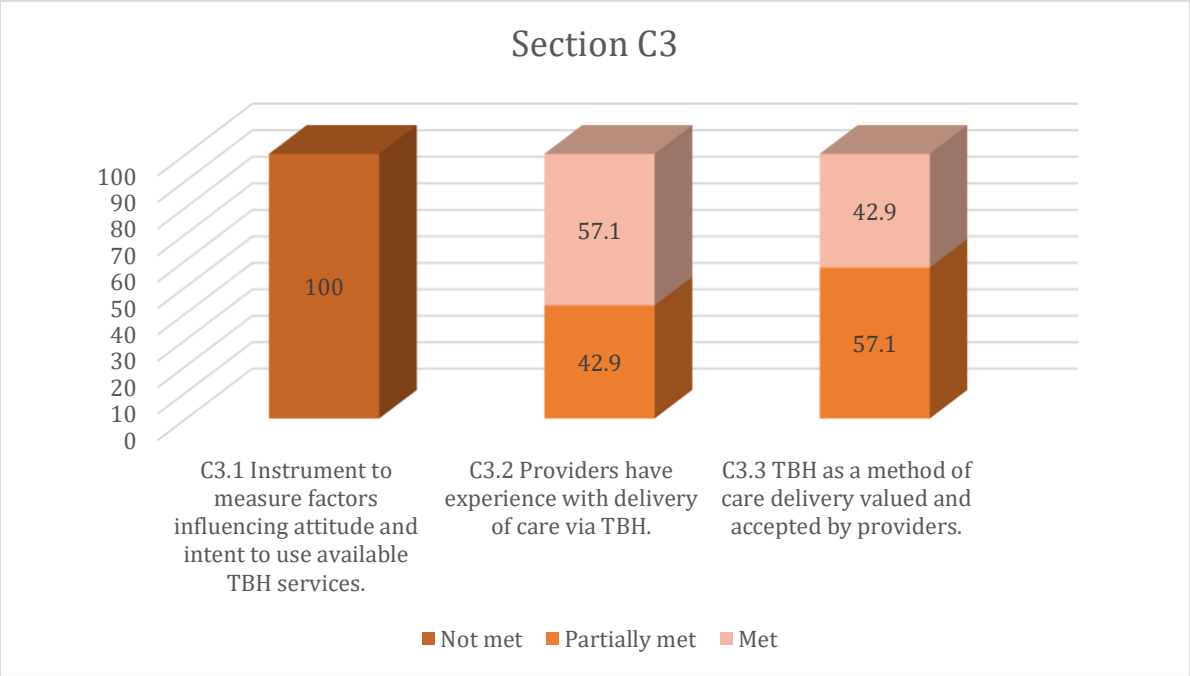


Figure 7. Results for section C3

Team Mentor (Committee Membership) Agreement Form

Appendix C: Daniel K. Inouye Graduate School of Nursing
DNP Project Team Mentor (Committee Membership) Agreement Form

DOCTOR OF NURSING PRACTICE PROJECT
DNP Project Clinical Question and Team Mentor (Committee Membership) Agreement Form

Graduation Year: 2022 **Phase 2 Site(s) Name:** Fort Hood, Texas

Name(s) of DNP Project Student Team:

1.	MAJ Amanda Canada	AGCNS ☐ FNP ☐ PMHNP ■ RNA ☐ WHNP ☐
2.	CPT Austin Feltman	AGCNS ☐ FNP ☐ PMHNP ■ RNA ☐ WHNP ☐
3.		AGCNS ☐ FNP ☐ PMHNP ☐ RNA ☐ WHNP ☐
4.		AGCNS ☐ FNP ☐ PMHNP ☐ RNA ☐ WHNP ☐
5.		AGCNS ☐ FNP ☐ PMHNP ☐ RNA ☐ WHNP ☐
6.		AGCNS ☐ FNP ☐ PMHNP ☐ RNA ☐ WHNP ☐

The tentative title of the DNP Project Proposal for this student group is:

Implementation of a Telebehavioral Health Program Evaluation Approach at Fort Hood Behavioral Health Clinics

Committee Approved DNP Project Clinical Question:

At Fort Hood clinics providing TBH, how does the implementation of a comprehensive program evaluation approach objectively capture context specific data to ensure care aligns with the highest quality standards?

Names of DNP Project Team Mentors *(type the name and obtain digital signatures)*:

I agree to serve as a member of the DNP Project Team (Team Mentors) for the above DNP Student Project Team. As a Project Team Mentor, I agree to the duties and responsibilities outlined within the DNP Project Manual which include but are not limited to the provision of consultation and guidance supporting the entire DNP project journey and to ensure the DNP project is of sufficient rigor and demonstrates doctoral level scholarship to meet the requirements for USUHS GSN graduation.

NOTE: You may have 3-4 DNP Team Mentors [committee members including your DNP Senior Mentor (Chair)]. The Phase II Site Director may also be a member of the group, as well as other USUHS faculty or others who may serve as content experts. All non-USUHS faculty selected as a Team Mentor must be approved by the DNP Project Director.

Senior Mentor (Chair):	LTC Brent Donmoyer	Signature:	DONMOYER.BRENT.LOWELL.1036190198 Digitally signed by DONMOYER.BRENT.LOWELL.1036190198 Date: 2021.01.11 12:16:39 -05'00'	Date: 1/11/21
Team Mentor (Member):	MAJ Samantha Bazan	Signature:	BAZAN.SAMANTHA.ELIZABETH.1158144715 Digitally signed by BAZAN.SAMANTHA.ELIZABETH.1158144715 Date: 2021.01.19 08:09:59 -06'00'	Date: 1/19/21
Team Mentor (Member):		Signature:		Date:
Team Mentor (Member):		Signature:		Date:

Form Version: 4 December 2020

CITI Certificate USU Training

COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM)

COMPLETION REPORT - PART 1 OF 2
COURSEWORK REQUIREMENTS*

* NOTE: Scores on this Requirements Report reflect quiz completions at the time all requirements for the course were met. See list below for details. See separate Transcript Report for more recent quiz scores, including those on optional (supplemental) course elements.

- **Name:** Austin Feltman (ID: 9021715)
- **Institution Affiliation:** Office of the Under Secretary of Defense (Personnel and Readiness) (ID: 603)
- **Institution Email:** austin.feltman@usuhs.edu
- **Phone:** 301-295-1206

- **Curriculum Group:** OUSD P&R Human Research
- **Course Learner Group:** Biomed Research Coordinators, Clinical Coordinators, Study Coordinators & Research Administrators
- **Stage:** Stage 1 - Basic Course

- **Record ID:** 36024886
- **Completion Date:** 22-Mar-2020
- **Expiration Date:** 22-Mar-2023
- **Minimum Passing:** 80
- **Reported Score*:** 98

REQUIRED AND ELECTIVE MODULES ONLY	DATE COMPLETED	SCORE
Module for Non-DoD Personnel Conducting Research Involving Human Subjects Supported by the DoD (ID: 16769)	22-Mar-2020	No Quiz
Belmont Report and Its Principles (ID: 1127)	22-Mar-2020	3/3 (100%)
History and Ethics of Human Subjects Research (ID: 498)	22-Mar-2020	5/5 (100%)
Informed Consent (ID: 3)	22-Mar-2020	5/5 (100%)
Social and Behavioral Research (SBR) for Biomedical Researchers (ID: 4)	22-Mar-2020	4/4 (100%)
Records-Based Research (ID: 5)	22-Mar-2020	3/3 (100%)
Genetic Research in Human Populations (ID: 6)	22-Mar-2020	4/5 (80%)
Populations in Research Requiring Additional Considerations and/or Protections (ID: 16680)	22-Mar-2020	5/5 (100%)
Research Involving Prisoners (ID: 8)	22-Mar-2020	4/4 (100%)
Research Involving Children (ID: 9)	22-Mar-2020	3/3 (100%)
Research Involving Pregnant Women, Fetuses, and Neonates (ID: 10)	22-Mar-2020	3/3 (100%)
FDA-Regulated Research (ID: 12)	22-Mar-2020	5/5 (100%)
Research and HIPAA Privacy Protections (ID: 14)	22-Mar-2020	5/5 (100%)
Conflicts of Interest in Human Subjects Research (ID: 17464)	22-Mar-2020	5/5 (100%)
Defining Research with Human Subjects - SBE (ID: 491)	22-Mar-2020	5/5 (100%)
The Federal Regulations - SBE (ID: 502)	22-Mar-2020	4/5 (80%)
Assessing Risk - SBE (ID: 503)	22-Mar-2020	5/5 (100%)
Privacy and Confidentiality - SBE (ID: 505)	22-Mar-2020	5/5 (100%)
Research in Public Elementary and Secondary Schools - SBE (ID: 508)	22-Mar-2020	5/5 (100%)
Internet-Based Research - SBE (ID: 510)	22-Mar-2020	5/5 (100%)
International Studies (ID: 971)	22-Mar-2020	3/3 (100%)
The IRB Member Module - 'What Every New IRB Member Needs to Know' (ID: 816)	22-Mar-2020	5/5 (100%)
Office of the Under Secretary of Defense (Personnel and Readiness) (ID: 912)	22-Mar-2020	No Quiz

For this Report to be valid, the learner identified above must have had a valid affiliation with the CITI Program subscribing institution identified above or have been a paid Independent Learner.

Verify at: www.citiprogram.org/verify/?k31427991-a09e-416c-a9d7-6cd34124594e-36024886

Collaborative Institutional Training Initiative (CITI Program)
Email: support@citiprogram.org
Phone: 888-529-5929
Web: https://www.citiprogram.org

COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM)

COMPLETION REPORT - PART 2 OF 2
COURSEWORK TRANSCRIPT**

** NOTE: Scores on this Transcript Report reflect the most current quiz completions, including quizzes on optional (supplemental) elements of the course. See list below for details. See separate Requirements Report for the reported scores at the time all requirements for the course were met.

- **Name:** Austin Feltman (ID: 9021715)
- **Institution Affiliation:** Office of the Under Secretary of Defense (Personnel and Readiness) (ID: 603)
- **Institution Email:** austin.feltman@usuhs.edu
- **Phone:** 301-295-1206

- **Curriculum Group:** OUSD P&R Human Research
- **Course Learner Group:** Biomed Research Coordinators, Clinical Coordinators, Study Coordinators & Research Administrators
- **Stage:** Stage 1 - Basic Course

- **Record ID:** 36024886
- **Report Date:** 28-Mar-2020
- **Current Score**:** 98

REQUIRED, ELECTIVE, AND SUPPLEMENTAL MODULES	MOST RECENT	SCORE
Informed Consent (ID: 3)	22-Mar-2020	5/5 (100%)
Defining Research with Human Subjects - SBE (ID: 491)	22-Mar-2020	5/5 (100%)
The Federal Regulations - SBE (ID: 502)	22-Mar-2020	4/5 (80%)
Social and Behavioral Research (SBR) for Biomedical Researchers (ID: 4)	22-Mar-2020	4/4 (100%)
Belmont Report and Its Principles (ID: 1127)	22-Mar-2020	3/3 (100%)
Records-Based Research (ID: 5)	22-Mar-2020	3/3 (100%)
Assessing Risk - SBE (ID: 503)	22-Mar-2020	5/5 (100%)
Genetic Research in Human Populations (ID: 6)	22-Mar-2020	4/5 (80%)
Research Involving Prisoners (ID: 8)	22-Mar-2020	4/4 (100%)
Privacy and Confidentiality - SBE (ID: 505)	22-Mar-2020	5/5 (100%)
Research Involving Children (ID: 9)	22-Mar-2020	3/3 (100%)
Research Involving Pregnant Women, Fetuses, and Neonates (ID: 10)	22-Mar-2020	3/3 (100%)
FDA-Regulated Research (ID: 12)	22-Mar-2020	5/5 (100%)
Research in Public Elementary and Secondary Schools - SBE (ID: 508)	22-Mar-2020	5/5 (100%)
Research and HIPAA Privacy Protections (ID: 14)	22-Mar-2020	5/5 (100%)
Internet-Based Research - SBE (ID: 510)	22-Mar-2020	5/5 (100%)
History and Ethics of Human Subjects Research (ID: 498)	22-Mar-2020	5/5 (100%)
Office of the Under Secretary of Defense (Personnel and Readiness) (ID: 912)	22-Mar-2020	No Quiz
Populations in Research Requiring Additional Considerations and/or Protections (ID: 16680)	22-Mar-2020	5/5 (100%)
International Studies (ID: 971)	22-Mar-2020	3/3 (100%)
The IRB Member Module - 'What Every New IRB Member Needs to Know' (ID: 816)	22-Mar-2020	5/5 (100%)
Conflicts of Interest in Human Subjects Research (ID: 17464)	22-Mar-2020	5/5 (100%)
Module for Non-DoD Personnel Conducting Research Involving Human Subjects Supported by the DoD (ID: 16769)	22-Mar-2020	No Quiz

For this Report to be valid, the learner identified above must have had a valid affiliation with the CITI Program subscribing institution identified above or have been a paid Independent Learner.

Verify at: www.citiprogram.org/verify/?k31427991-a09e-416c-a9d7-6cd34124594e-36024886

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Show All

Office of the Under Secretary of Defense (Personnel and Readiness) Records (ID 603)

OUSD P&R Human Research - Biomed Research Coordinators, Clinical Coordinators, Study Coordinators & Research Administrators (ID 100075)

Stage	Record ID	Passing Score	Your Score	Start Date	Completion Date	Expiration Date	Gradebook	Completion Record
Basic Course	36025722	80%	90%	23-Mar-2020	24-Mar-2020	24-Mar-2023	View	View-Print-Share

OUSD P&R Human Research - Biomedical Investigators and Research Study Team (ID 36670)

Stage	Record ID	Passing Score	Your Score	Start Date	Completion Date	Expiration Date	Gradebook	Completion Record
Basic Course	36025705	80%	91%	23-Mar-2020	24-Mar-2020	24-Mar-2023	View	View-Print-Share

OUSD P&R Human Research - Biomedical Research Support Staff (ID 36672)

Stage	Record ID	Passing Score	Your Score	Start Date	Completion Date	Expiration Date	Gradebook	Completion Record
Basic Course	36025721	80%	94%	23-Mar-2020	24-Mar-2020	24-Mar-2023	View	View-Print-Share

OUSD P&R Human Research - Social and Behavioral Investigators and Research Study Team (ID 36671)

Stage	Record ID	Passing Score	Your Score	Start Date	Completion Date	Expiration Date	Gradebook	Completion Record
Basic Course	36025720	80%	94%	23-Mar-2020	24-Mar-2020	24-Mar-2023	View	View-Print-Share

Good Clinical Practice (U.S. FDA Focus) - GCP for Clinical Trials with Investigational Drugs and Medical Devices (U.S. FDA Focus) (ID 104632)

Stage	Record ID	Passing Score	Your Score	Start Date	Completion Date	Expiration Date	Gradebook	Completion Record
GCP	36025723	80%	100%	22-Mar-2020	22-Mar-2020	22-Mar-2023	View	View-Print-Share

Responsible Conduct of Research (RCR) (ID 125083)

Stage	Record ID	Passing Score	Your Score	Start Date	Completion Date	Expiration Date	Gradebook	Completion Record
Basic Course	36025706	80%	100%	23-Mar-2020	23-Mar-2020	23-Mar-2023	View	View-Print-Share

GCP – Social and Behavioral Research Best Practices for Clinical Research (ID 143802)

Stage	Record ID	Passing Score	Your Score	Start Date	Completion Date	Expiration Date	Gradebook	Completion Record
Basic Course	36025707	100%	100%	22-Mar-2020	23-Mar-2020	23-Mar-2023	View	View-Print-Share

Form 3202N (final copy from Office of VPR)

USUHS FORM 3202N
DANIEL K. INOUYE GRADUATE SCHOOL OF NURSING
EVIDENCE-BASED PRACTICE/PERFORMANCE IMPROVEMENT PROPOSAL

VPR Date Stamp

Project Number: _____ (VPR will assign)

Project Title: **Implementation of a Telebehavioral Health Program Evaluation Approach at Fort Hood Behavioral Health Clinics**

SECTION A: STUDENT POC INFORMATION

1. Name (Last, First, MI): **CANADA, AMANDA, N.** Student E-mail: **amanda.canada@usuhs.edu**
2. Home Address: **4835 Cordell Ave, Apt 406, Bethesda, MD 20814** Cell Number: **210-563-3299**

SECTION B: COMMITTEE CHAIR / SENIOR MENTOR INFORMATION

3. Name (Last, First, MI): **DONMOYER, BRENT, L**
4. Telephone: **301-295-1025** Fax: E-mail: **brent.donmoyer@usuhs.edu**
5. USUHS Building/ Room No.: **Bldg E / Room # 1016**

SECTION C: PROJECT INFORMATION

6. Attach the Abstract for the proposal, including the following sections: Site Location of the Project, Title, Authors, Background or Problem/Issue, Clinical Question/Purpose, Project Design, Anticipated Organizational Impact/Implications for Practice and also include the Proposed Timeline. Single space the abstract and use Times New Roman font, size 12.
7. Is this proposal related to an active research project of the Chair/Senior Mentor identified in Section B? ☐ Yes ☒ No
   If yes, complete below; if no, proceed to Part 8.
   Project Number: _____
   Project Title: _____
   Project Start Date: _____ Project End Date: _____
8. Anticipated period of performance: Project Start Date: **5/31/2021** Project End Date: **4/30/2022**
9. Performance Site(s): **FORT HOOD, TEXAS**
10. Does this project involve any classified information? (Contact the USUHS Security Office for guidance) ☐ Yes ☒ No
11. Do you have a funding source for this project? ☐ Yes ☒ No ☐ NA
    If yes, specify the funding agency and the amount provided:

SECTION D: SIGNATURES

The following signatures attest to the validity of the above information:

Amanda Canada Digitally signed by Amanda Canada Date: 2021.02.01 11:12:55 -05'00'	DONMOYER.BRENT.LOWELL.1036190198 Digitally signed by DONMOYER.BRENT.LOWELL.1036190198 Date: 2021.02.04 10:47:46 -05'00'
Student (Project Point of Contact for the Group) (Signature and Date)	Chair/Senior Mentor (Signature and Date)
Chair/Program Director (Signature and Date)	Chair/Program Director (Signature and Date)
DNP Project Director or PhD Director (Signature and Date)	Associate Dean for Academic Affairs, GSN (Signature and Date)
Associate Dean for Research, GSN (Signature and Date)	Dean, DKI Graduate School of Nursing (Signature and Date)

In light of the above signatures, the project is approved.

USUHS Vice President for Research _____ Date _____

USUHS Form 3202N (VPR) - Revised Sep 2015 v1.2
Previous versions are obsolete

Institutional Review Board Letter of Determination

DEPARTMENT OF THE ARMY
HEADQUARTERS, CARL R. DARNALL ARMY MEDICAL CENTER
36065 SANTA FE AVENUE
FORT HOOD, TEXAS 76544-5060

MCXI-QCD 28 April 2021

MEMORANDUM FOR MAJ Amanda Canada

SUBJECT: Determination of Not Research

PROTOCOL TITLE: Implementation of a Telebehavioral Health Program Evaluation Approach at Fort Hood Behavioral Health Clinics

CRDAMC PROTOCOL #: 21-15

REVIEW TYPE: Administrative

ACTION: NOT RESEARCH STATUS DETERMINATION

1. The Carl R. Darnall Army Medical Center (CRDAMC) Human Research Protections Office (HRPO) received the above-referenced project dated 21 April 2021 for review of applicability of human subjects protections regulations.

2. The CRDAMC Human Protections Director (HPD) has reviewed your proposed project and has determined that your project does not meet the definition of research as defined under 32 CFR 219.102(l).

3. Research is defined under 32 CFR 219.102(l). as follows: “Research means a systematic investigation, including research development, testing, and evaluation, designed to develop or contribute to generalizable knowledge.”

4. Based on the information you provided, the project was determined to be “not research” for the following reasons:

a. The project is not designed to contribute to generalizable knowledge. The project is meant to fulfill a GME requirement to complete an evidence based practice (EBP) project for degree completion. The project is not designed to influence theory or future research designs.

b. The intent of the project is to conduct a program evaluation of the telebehavioral health (TBH) services at Fort Hood clinics. Project outcomes will be shared with involved leadership and key stakeholders to revise long-term goals, implementation design, and sustainment strategies as needed, and to provide continuous quality improvement and improve staff knowledge and education.

MCXI-QCD
Subject: Determination of Not Research

5. Because the project has been determined to be "not research", it is not subject to further review from the CRDAMC HRPO. **This determination should not be construed as approval to initiate the project**. **Other institutional approvals may be required** and should be coordinated through your department. Any collection of information as defined by DoDI 8910.01 must comply with DoDI 1100.13 "DoD Surveys."

6. Because this is a Quality Improvement (QI)/Process Improvement (PI) Project, please ensure you work with the **QI/PI staff** going forward. The POC for QI/PI projects is Kerry Perez, at kerry.r.perez.civ@mail.mil or (254) 553-1962.

7. You are reminded that you must still comply with all HIPAA regulations and policies, including DoDM 6025.18, which may require further approvals or other documentation that you are responsible for obtaining. These requirements are outside the scope of the CRDAMC HRPO. For HIPAA related assistance please contact CRDAMC's HIPAA Privacy Officer or Security Officer at usarmy.hood.medcom-crdamc.mbx.hipaa@mail.mil.

8. Please be reminded that your project **may become research subject to IRB review** if it becomes and/or includes a systematic investigation to develop or contribute to generalizable knowledge. In the event there is a change to the above-described project that may affect its determination, please contact your CRDAMC HRPO who will re-evaluate the project and determine if a research protocol must be submitted in eIRB.

9. You are reminded that **publication clearance is required prior to the release of any information outside of the institution**. Please refer to the Public Affairs Office (PAO) for specific requirements.

10. The POC for this review is the CRDAMC HPD at usarmy.hood.medcom-crdamc.mbx.research@mail.mil or (254) 553-9779.

Signature applied by Rachell Leanne Jones
on 04/28/2021 09:50:53 AM CDT

RACHELL L. JONES, PHD
Human Protections Director

Notice of Project Approval

USU
Uniformed Services University

OFFICE OF RESEARCH
4301 JONES BRIDGE ROAD
BETHESDA, MAYLAND 20814
PHONE: (301) 295-3303; FAX: (301) 295-6771

NOTICE OF PROJECT APPROVAL

Change Number: Original

VPR Site Number:	GSN-61-11976
Principal Investigator:	Canada, Amanda
Department:	Graduate School of Nursing
Project Type:	Student
Project Title:	Implementation of a Telebehavioral Health Program Evaluation Approach at Fort Hood Behavioral Health Clinics
Project Period:	6/30/2021 to 6/30/2022

Assurance and Progress Report Information:

Name	Sup	Approval Type	Status	Approved On	Forms Received
Progress Report	0			To be Submitted	N/A

Remarks:
This Notice Of Project Approval has been reviewed and approved. Please remember that you must submit a final Progress Report (Form 3210) upon completion of this project.

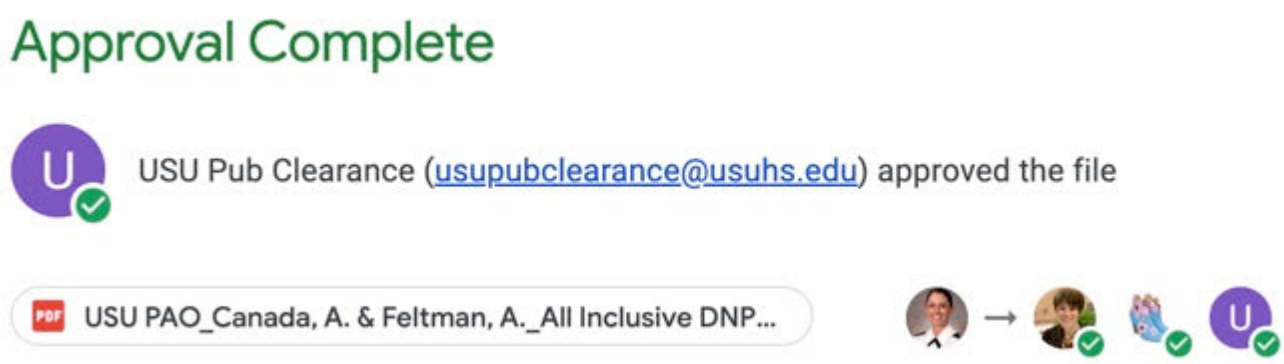
Questions regarding this approval should be directed to the following person in the Office of Research:
Sharon McIver, (301) 295-9814.

RANDOLPH.TOY.A.V.1242107698 Digitally signed by RANDOLPH.TOYA.V.1242107698 Date: 2021.07.12 16:10:38 -04'00'

Mark G. Kortepeter, MD, MPH Date
FACP, FIDSA, FASTMH
COL (R) MC US Army
Vice President for Research
Uniformed Services University of the Health Sciences

cc: File
Dr. Kennett Radford
Laura, Taylor

PAO Clearance /Level of Dissemination Classification



DNP Project Completion Verification Form

Appendix G: Daniel K. Inouye Graduate School of Nursing
DNP Project Completion Verification Form

DOCTOR OF NURSING PRACTICE PROJECT
Completion Verification Form

The DNP Project titled: Implementation of a Telebehavioral Health Program Evaluation Approach at Fort Hood Behavioral Health Clinics

was completed at Fort Hood, Texas by the following student(s):

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MAJ Amanda Canada	Amanda Canada Digitally signed by Amanda Canada Date: 2022.03.25 09:36:58 -05'00'	25MAR2022
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The DNP Practice Project Team verifies that the following components of the DNP project, accomplished by the above students, is of sufficient rigor and demonstrates doctoral level scholarship to meet the requirements for USUHS GSN graduation:

- Presentation to the DNP Project Team,
- Presentation of DNP project to the leadership at the Phase II Site,
- Abstract/Impact Statement *(Appendix I)*, and
- DNP Project Written Report.

Verified by:

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Implementation of a Telebehavioral Health Program Evaluation Approach at Fort Hood Behavioral Health Clinics

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Significance of the Problem

Background

- Mental health disorders affect over 60 million adults in the United States (Bashshur et al., 2016).
- Challenges with access to mental health services lead to poorer health outcomes and increased costs to the healthcare system (American Hospital Association, 2019; Bashshur et al., 2016).
- Telebehavioral health (TBH) is an effective solution that circumvents stigma barriers and addresses the shortage of mental health resources, increases access to care, and facilitates the delivery of care (Bashshur et al., 2016; Mishkind et al., 2013; Waibel et al., 2017).
- Conducting a piecemeal TBH program evaluation devalues the program's impact, which in turn limits the adoption and expansion of TBH services (Maeder et al., 2015).
- The development of a comprehensive approach founded in evidence, but flexible enough to adapt to the needs of the organization, is essential for TBH program evaluation (Greenhalgh et al., 2017; Maeder et al., 2015; van Dyk, 2014).

Problem

- Lack of a standardized, evidence-based TBH program evaluation approach at Fort Hood.

Clinical Question & Objectives

Clinical Question: At Fort Hood clinics providing TBH, how does the implementation of a comprehensive program evaluation approach objectively capture context specific data to ensure care aligns with the highest quality standards?

Objectives:

(1) synthesize current literature on organizational TBH program evaluations and develop a program evaluation approach

(2) conduct the TBH program evaluation approach at Fort Hood behavioral health clinics

(3) disseminate the TBH program evaluation results to clinics and key-leaders and formulate recommendations to promote TBH sustainment

Project Design

General Approach: This project introduced a new, summative program evaluation approach. A 23-item evidence-based approach was developed and contains contextually appropriate structural and process measures. Items were categorized into three main checklist domains: **organization** (blue), **technology** (orange), and **provider** (green). **Setting:** The implementation of the program evaluation checklist was conducted at Fort Hood, Texas. Seven out-patient behavioral health clinics participated and 45-60 minute interviews were conducted with each clinic chief. **Design**: Evidence-based program evaluation approach. **Data Analysis**: Descriptive statistics were used to assess TBH program adherence with the outlined evidence-based program evaluation approach. Program evaluation checklist items were scored as *not met*, *partially met*, or *met* and assigned a score of 0, 1, or 2, respectively. To evaluate TBH program performance, data was aggregated and scored based on the percentage of partially met and met criteria.

23-item TBH Program Evaluation Checklist	
TBH use is supported in clinic culture.	Infrastructure aligns with technologic and security standards
TBH practice updates clearly disseminated	Physical space available and appropriate for TBH care
Available TBH support staff and resources	Infrastructure cross compatibility evident
Policies and SOPs are readily accessible	Single sign on and two factor authentication present
Emergency management protocol available	IT support available
Credentialing and associated CPGs available	Clear user operability manual available
Legal and ethics policy available	IT contingency plan available
Policy and SOP for expansion of TBH available	Competency assessment available
Mission and vision clarify TBH priority	Formal initial training and simulation in place
TBH priority emphasized in organization mission and vision	Provider educated to clinical indicators for TBH use
	Instrument to measure factors influencing attitude and intent to use available
	Providers have experience with TBH care delivery
	TBH as a method of care delivery valued and accepted by providers

"The authors would like to acknowledge our DNP Project Mentors: LTC Brent Donmoyer (Senior Mentor) and Dr. Jouhayna Gebara, for their support, guidance, and assistance. Their time, effort, and dedication to this project is appreciated more than words can express."

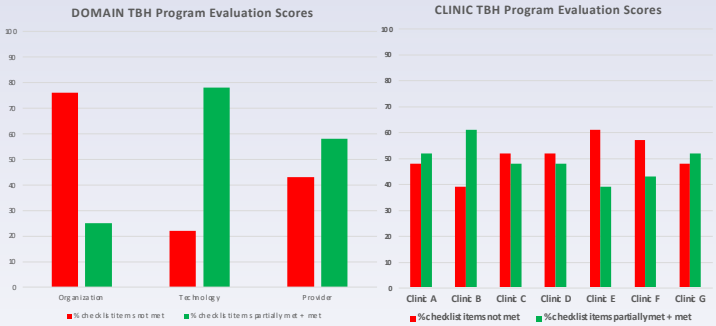
Organizing Framework

Model for Evidence-Based Practice Change



(Rosswurm & Larrabee, 1999)

Project Results



Percentage of checklist items partially met and met for each checklist domain across all 7 clinics:
Organization: 25% **Technology: 78%** **Provider: 58%**

Average clinic program evaluation score for all checklist items partially met and met: 49%
Range of clinic program evaluation scores for all checklist items partially met and met: 39% - 61%

The following program evaluation checklist items scored the highest in each domain:

- **Organization**: TBH use is supported in clinic culture.
- **Technology**: Infrastructure aligns with technologic and security standards, physical space available and appropriate for TBH care, and information technology support is available.
- **Provider**: Providers are educated on clinical indicators for TBH use. Lack of provider competency assessment.

If a checklist item was partially met, a qualifying statement was annotated; the following common themes emerged for each domain:

- **Organization**: TBH was used and offered by exception; lack of organizational TBH policies and procedures; shift in organization mission and priorities as COVID restrictions changed.
- **Technology**: Issues with hardware and software capabilities; unpredictability of internet connectivity and bandwidth for provider and patient; lack of contingency plan when internet and/or telephone capabilities were down.
- **Provider**: Provider preference for face-to-face encounters.

Analysis of the Results

For the first program evaluation, the Fort Hood TBH program performed well overall meeting a portion of the 23-item checklist and objectively captured context specific data. The lack of organizational TBH policy at Fort Hood was inconsistent with current literature and practices as most TBH programs have identified and accessible policies in place. However, the development and dissemination of a TBH policy that encompasses items listed in the organization domain can improve the organization domain score. Technology and provider domain performance aligned with current literature and practices. Most TBH programs have a strong technological component, similar to Fort Hood. Furthermore, the lack of or difficulty in developing and standardizing TBH training and competency requirements is consistent throughout the literature and in this project's findings. Offering initial and ongoing training opportunities and developing TBH competency assessment measures can improve the provider domain score.

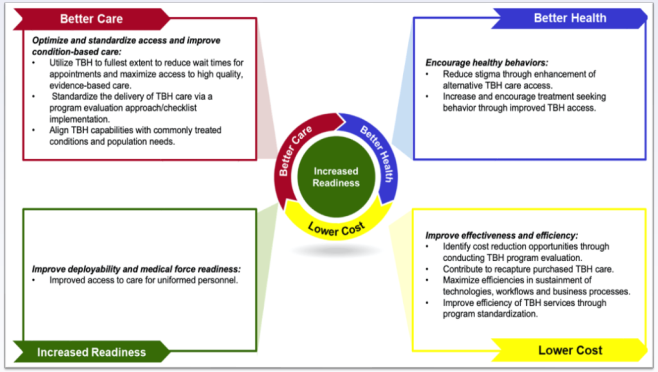
Project limitations: organizational restructuring of clinic chiefs as well as hiring new chiefs. This contributed to reports of limited historical context specific to the clinic. While this may have complicated data gathering, it did not necessarily prohibit the successful execution of the TBH program evaluation.
Project implications: The demand for TBH services continues to persist despite the option to return to face-to-face encounters. This program evaluation approach can provide the foundation and a path forward to ensure the implementation and standardization of TBH services across the organization aligns with the latest evidence-based quality and industry standards.

Recommendations for Program Improvement

BOTTOM LINE: A standardized, evidence-based TBH program evaluation approach is needed to support continuous process improvement and alignment with the healthcare initiatives of the Military Health System and Defense Health Agency's Quadruple Aim

Organization	Standardized, widely disseminated, and easily accessible TBH policy/SOP
Technology	Singular TBH platform with reliable connectivity and access by both the provider and patient; readily available TBH champions and IT support resources to all end-users
Provider	Competency assessment measures; initial and ongoing TBH training with easily accessible continuing education opportunities

Organizational Impact



Future Directions for Research and Practice

Future Research:

- Continued exploration of program evaluation criteria
- TBH program implementation frameworks
- TBH competency assessment measures
- Facilitators and barriers to program standardization, sustainment and scalability
- Analysis of considerations for application within the pediatric and adult (dependent and retiree) populations

Future Practice:

- Virtual health expansion and utilization will continue to be a MHS priority
- MHS Video Connect (virtual health platform) and MHS Genesis (electronic health record system)
- BHDP integration with patient portal and TBH workflow
- Implementation of program evaluation at other military installations

"The views expressed in this poster are those of the authors and do not necessarily reflect the official policy or position of the Uniformed Services University of the Health Sciences, the Department of Defense, or the United States government."

Implementation of a Telebehavioral Health Program Evaluation Approach at Fort Hood Behavioral Health Clinics



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Military Treatment Facility – Fort Hood, Texas

The Daniel K. Inouye Graduate School of Nursing

Doctor of Nursing Practice Project

Disclaimer

- The views expressed in the presentation are those of the authors and do not necessarily reflect the official policy or position of the Uniformed Services University, the Department of Defense, or the United States Government
- There are no financial relationships that exist between the speakers and a commercial entity
- The authors declare no conflicts of interest

Introduction

- The demand for mental health services is currently outpacing the supply of qualified mental health care providers
- Telebehavioral health (TBH) refers to a subset of telemedicine
- TBH has the capability to:
  - Increase access to care for military members
  - Decrease the provider shortage
  - Existing evidence-based solution to address identified challenges

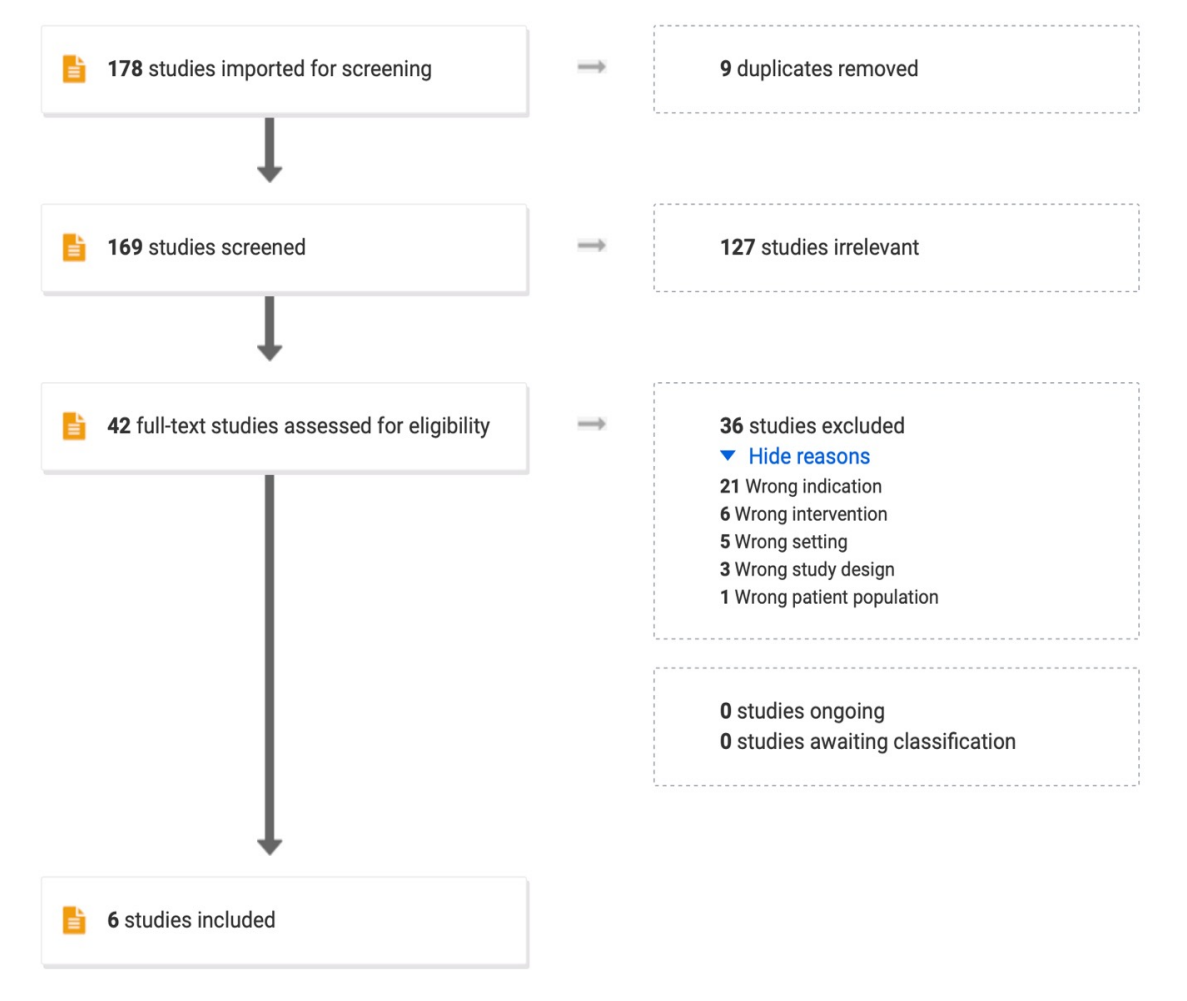
(Bashshur et al., 2016; Department of Defense, 2017; Mishkind et al., 2013; van Dyk, 2014; Waibel et al., 2017)

Introduction

- Solely implementing a TBH program is not sufficient
- Congress has challenged the Military Health System (MHS) to report internal and external measures of quality and reliability of the current TBH system at each military facility
- An evidence-based program evaluation approach can assist in the assessment of a TBH program
- Evaluation of TBH implementation is crucial to program standardization, sustainability, and scalability

(Maeder et al., 2015; U.S. Government Accountability Office, 2017)

Literature Search



Databases:

CINAHL (92)
PubMed (57)
PsychInfo (29)

Search terms:

Telebehavioral health
Telemental health
Telepsychiatry
Program
Evaluation
Structural/process outcomes
Organization
Technology
Provider

Significance: Problem

- Mental health disorders affect over 60 million adults in the United States
- TBH is an effective solution that
  - Circumvents stigma barriers
  - Addresses the shortage of mental health resources
  - Increases access to care
  - Facilitates the delivery of care
- Conducting a piecemeal TBH program evaluation devalues the program's impact, adoption, and expansion
- **Practice gap**: lack of a standardized, evidence-based TBH program evaluation approach at Fort Hood

(American Hospital Association, 2019; Bashshur et al., 2016; Greenhalgh et al., 2017 ; Maeder et al., 2015; Mishkind et al., 2013; van Dyk, 2014; Waibel et al., 2017)

Significance: Solution

- Taxonomy of TBH consists of 3 main domains:
- **Organization**
  - Organizational support, priorities, and performance indicators, policies/SOPs
- **Technology**
  - Infrastructure, interoperability, end-user operability
- **Provider**
  - Competency, training, attitude/intent to use
- The development of a comprehensive approach founded in evidence, but flexible enough to adapt to the needs of the organization, is essential for TBH program evaluation

(Greenhalgh et al., 2017; Hilty et al., 2020; Maeder et al., 2015; van Dyk, 2014; Vis et al., 2018)

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Clinical Question

- At Fort Hood Behavioral Health Clinics, how does the implementation of a comprehensive TBH program evaluation approach objectively capture context specific data to ensure care aligns with the highest quality standards?

Focus Areas

(1) **synthesize** current literature on organizational TBH program evaluations and inform the development of this project's program evaluation approach

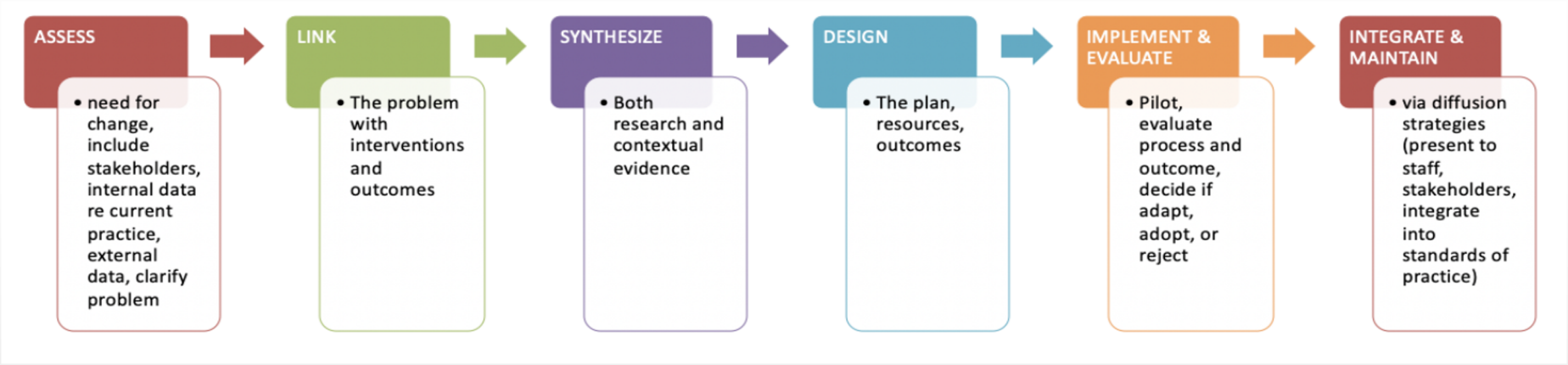
(2) **conduct** the TBH program evaluation approach at Fort Hood behavioral health clinics

(3) **disseminate** the TBH program evaluation results to clinics and key-leaders and formulate recommendations to promote TBH standardization

(Greenhalgh et al., 2017; Maeder et al., 2015; van Dyk, 2014)

Organizing Framework

Model for Evidence-based Practice Change



(Rosswurm & Larrabee, 1999)

Project Design

General Approach

- New, summative program evaluation approach
- 23-item evidence-based approach was developed
- Items were categorized into three main checklist domains: **organization** (blue), **technology** (orange), and **provider** (green)

Setting

- Fort Hood, Texas
- Seven out-patient behavioral health clinics participated (6 embedded BH, 1 multi-disciplinary clinic)
- 45-60 minute interviews were conducted with each clinic chief

Project Design

- **Design**
  - Evidence-based program evaluation approach
- **Data Analysis**
  - Descriptive statistics were used to assess TBH program adherence
  - Program evaluation checklist items were scored as ***not met***, ***partially met***, or ***met*** and assigned a score of **0**, **1**, or **2**, respectively
  - Data was aggregated and scored based on the percentage of not met, partially met, and met criteria

23-Item TBH Program Evaluation Approach

- TBH use is supported in clinic culture.
- TBH practice updates clearly disseminated
- Available TBH support staff and resources
- Policies and SOPs are readily accessible
- Emergency management protocol available
- Credentialing and associated CPGs available
- Legal and ethics policy available
- Policy and SOP for expansion of TBH available
- Mission and vision clarify TBH priority
- TBH priority emphasized in organization mission and vision
- Infrastructure aligns with technologic and security standards
- Physical space available and appropriate for TBH care
- Infrastructure cross compatibility evident
- Single sign on and two factor authentication present
- IT support available
- Clear user operability manual available
- IT contingency plan available
- Competency assessment available
- Formal initial training and simulation in place
- Provider educated to clinical indicators for TBH use
- Instrument to measure factors influencing attitude and intent to use available
- Providers have experience with TBH care delivery
- TBH as a method of care delivery valued and accepted by providers

Procedural Steps

Fort Hood DNP Project Timeline (Calendar) Year 1 (2020)												
Activity/Month	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUN**	**JUL**	**AUG**	**SEP**	**OCT**	**NOV**	**DEC**
Phase 1: Assess the current TBH program at Fort Hood and **link** the problem to potential interventions and outcomes.												
Task 1: Communication with Fort Hood stakeholders to determine current state of their TBH program.			X	X	X							
Task 2: TBH program evaluation approach research and literature review to support the development of a TBH program evaluation approach/checklist.				X	X	X	X	X				
Task 3: Ongoing stakeholder engagement meetings.									X	X	X	
Phase 2: Synthesize the evidence and contextual information and **design** the program evaluation approach/checklist.												
Task 1: Synthesis of evidence-based metrics for a TBH program evaluation approach.					X	X						
Task 2: Design and develop program evaluation approach/checklist.						X	X	X	X	X		
Task 3: DNP project presentation to USU faculty, peers, and Fort Hood key stakeholders.											X	
Task 4: Finalization of project in preparation for IRB submission.											X	X

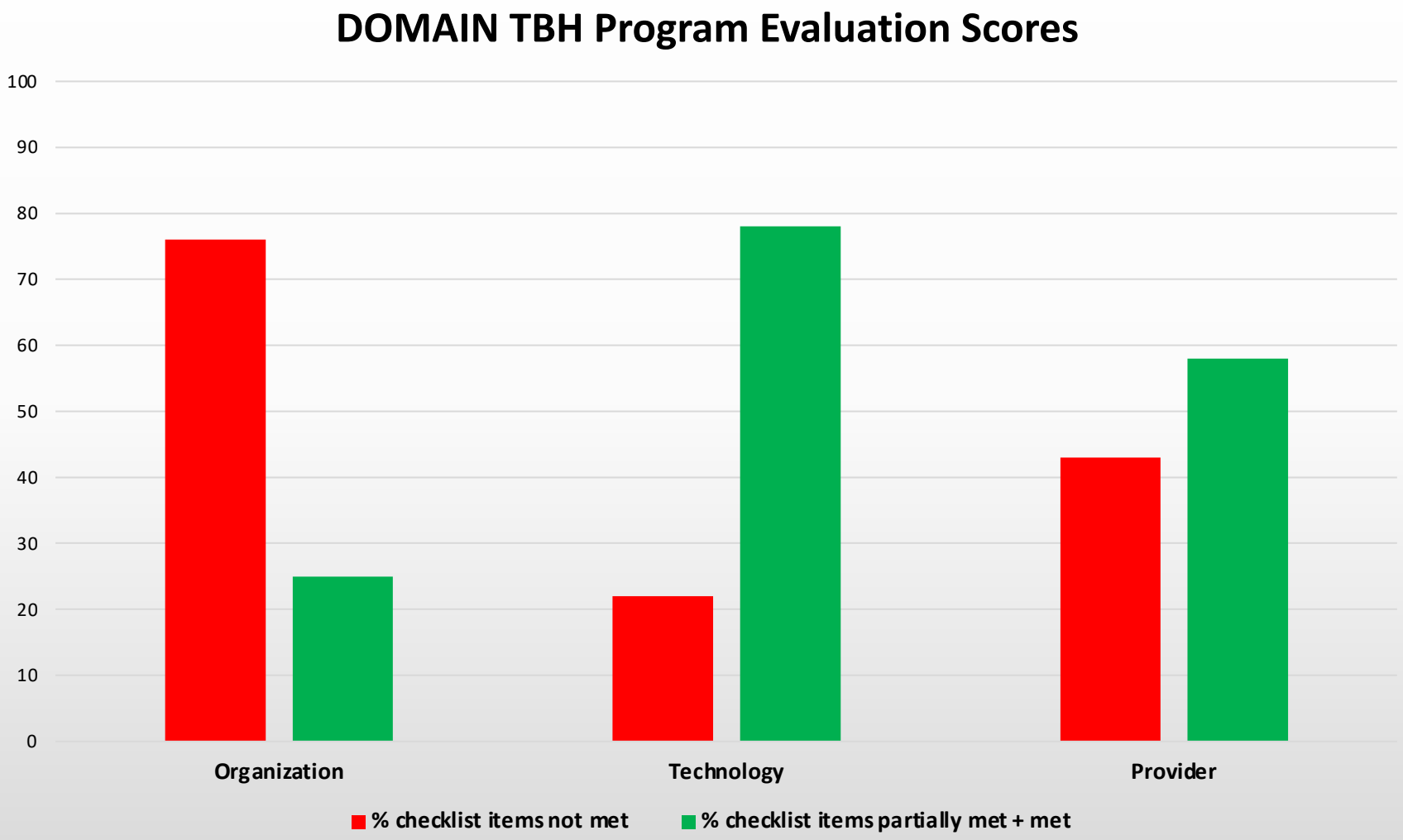
Procedural Steps

Fort Hood DNP Project Timeline (Calendar) Year 2 (2021)												
Activity/Month	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUN**	**JUL**	**AUG**	**SEP**	**OCT**	**NOV**	**DEC**
Phase 2 Continued: Synthesize the evidence and contextual information and **design** the program evaluation approach/checklist.												
Task 5: USUHS VPR Submission and Approval.				X	X							
Task 6: Site IRB Submission and Approval.				X	X							
Phase 3: Program evaluation **implementation** and data collection.												
Task 1: In-person brief to key stakeholders.					X							
Task 2: Execute TBH program evaluation at clinics.						X	X					
Task 3: Monthly meeting with key stakeholders to update on program evaluation progress and status.						X	X	X	X	X	X	X
Phase 4: Evaluate findings and analyze data from program evaluation.												
Task 1: Evaluate data and perform statistical testing.											X	X
Task 2: Based on the data evaluation and analysis, identify TBH program areas of strength and improvement.											X	X

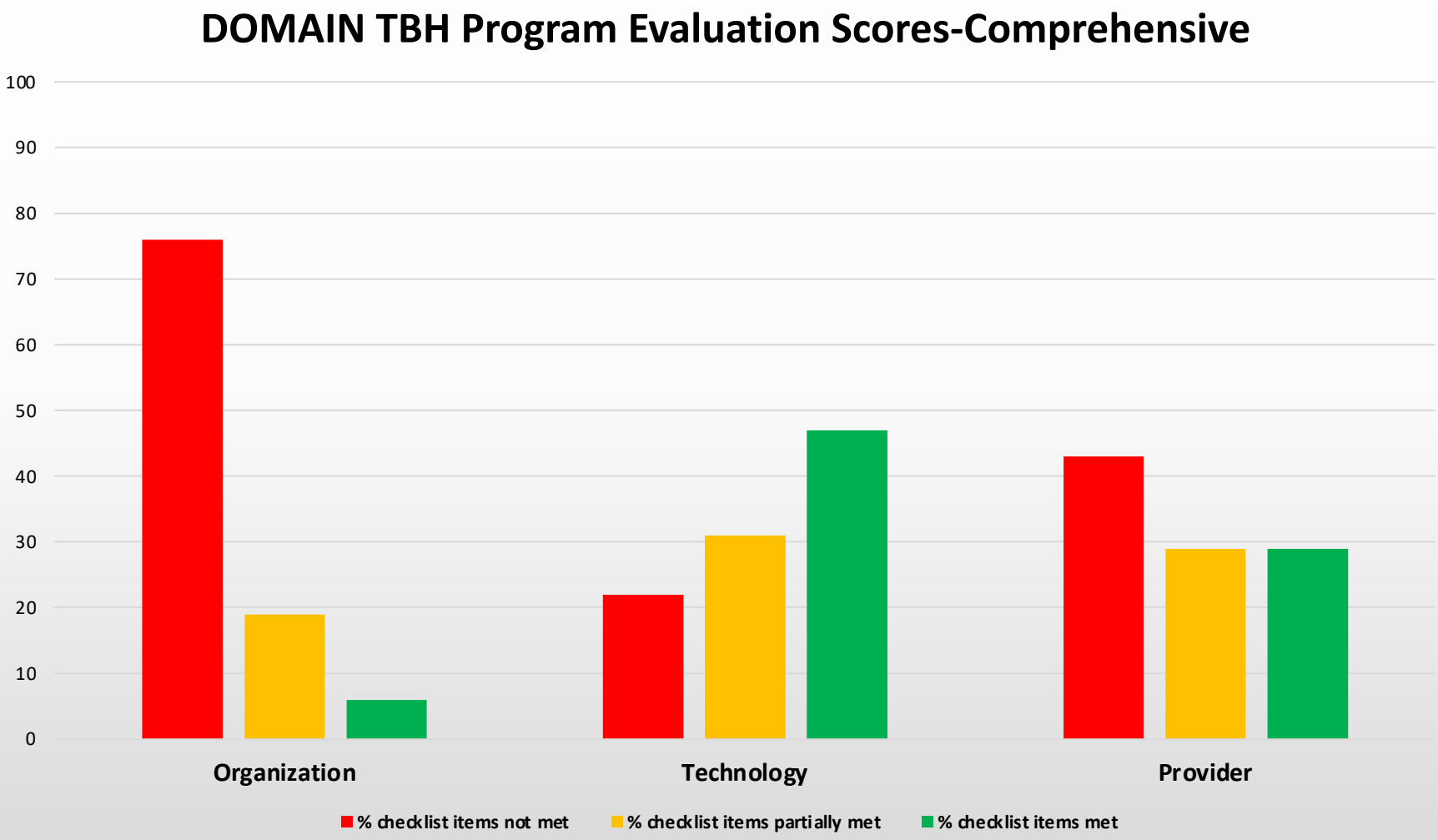
Procedural Steps

Fort Hood DNP Project Timeline (Calendar) Year 1 (2022)												
Activity/Month	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUN**	**JUL**	**AUG**	**SEP**	**OCT**	**NOV**	**DEC**
Phase 4 Continued: Evaluate findings and analyze data from program evaluation.												
Task 2 cont.: Based on the data evaluation and analysis, identify TBH program areas of strength and improvement.	X											
Phase 5: Integrate and **maintain** findings and recommendations.												
Task 1: Development of resource recommendation handbook based on evaluation findings.	X	X										
Task 2: Dissemination and presentation of project findings and recommendations to Fort Hood key leadership and stakeholders.			X	X								
Task 3: Manuscript development and submission for journal publication.	X	X	X	X	X	X	X					

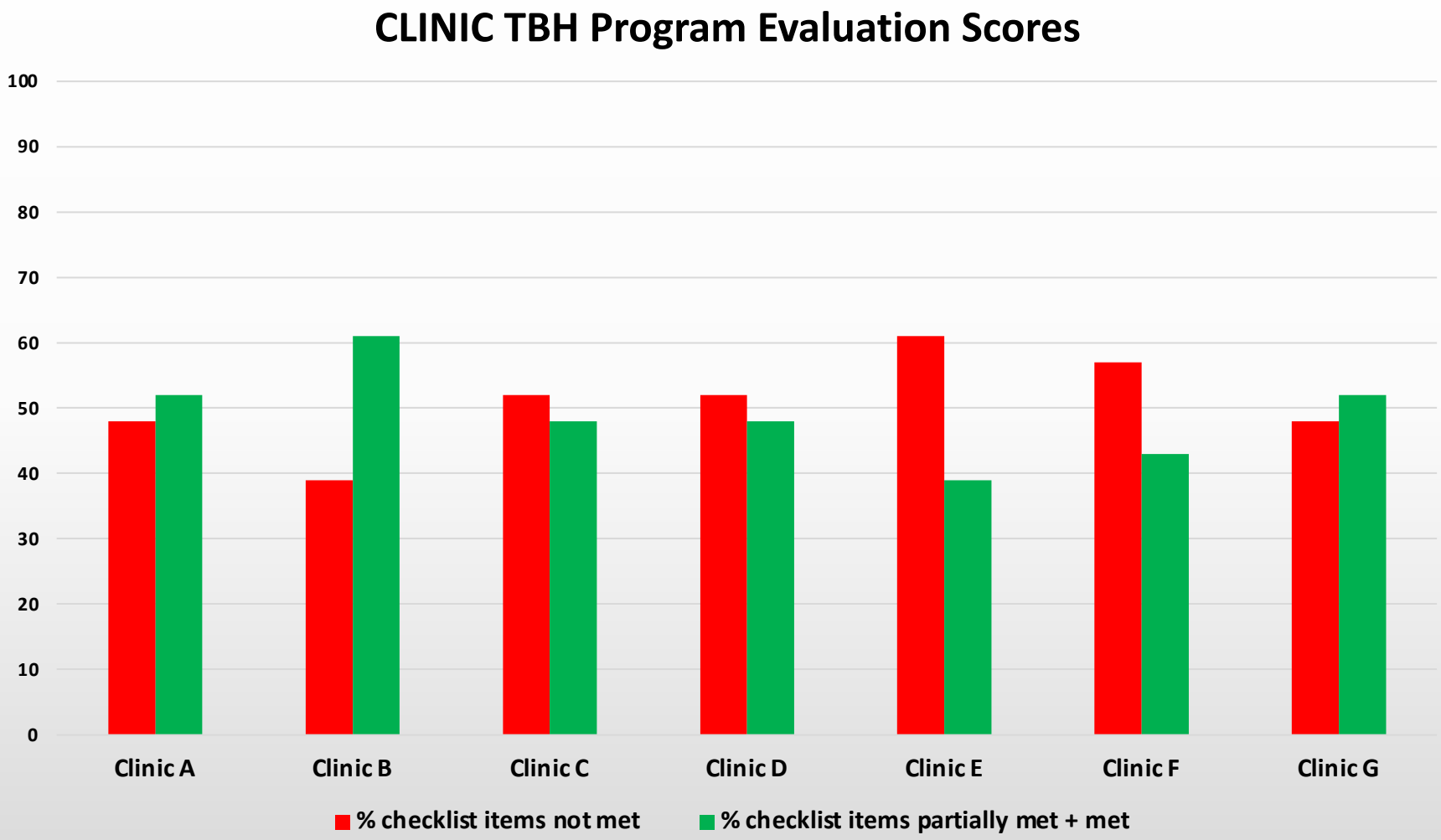
Results


DOMAIN TBH Program Evaluation Scores
100
90
80
70
60
50
40
30
20
10
0
Organization
Technology
Provider
% checklist items not met
% checklist items partially met + met

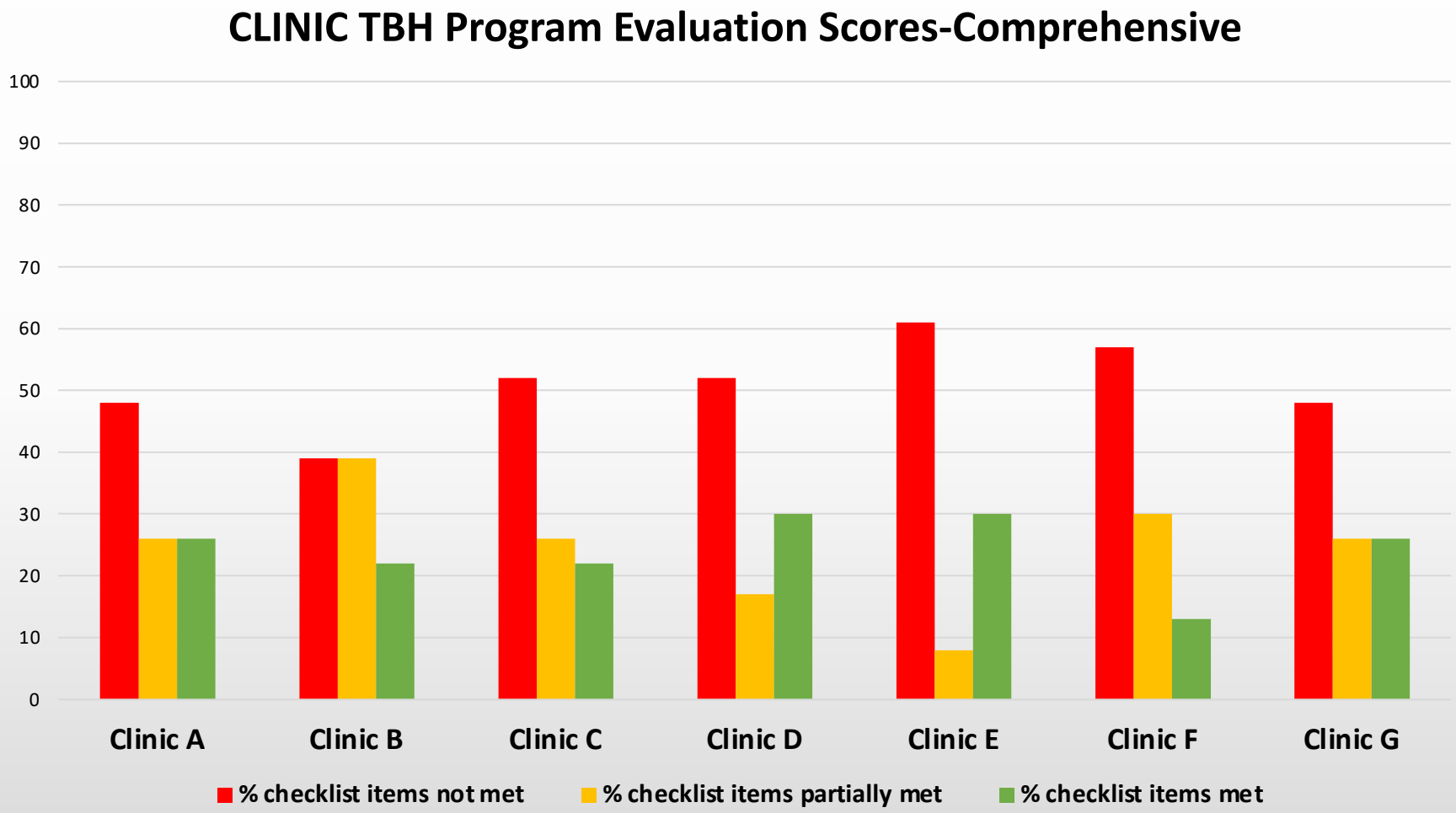
Results


DOMAIN TBH Program Evaluation Scores-Comprehensive
100
90
80
70
60
50
40
30
20
10
0
Organization
Technology
Provider
% checklist items not met
% checklist items partially met
% checklist items met

Results


CLINIC TBH Program Evaluation Scores
100
90
80
70
60
50
40
30
20
10
0
Clinic A
Clinic B
Clinic C
Clinic D
Clinic E
Clinic F
Clinic G
% checklist items not met
% checklist items partially met + met

Results


CLINIC TBH Program Evaluation Scores-Comprehensive
100
90
80
70
60
50
40
30
20
10
0
Clinic A
Clinic B
Clinic C
Clinic D
Clinic E
Clinic F
Clinic G
% checklist items not met
% checklist items partially met
% checklist items met

Analysis

- Quantitative measures
  - Benchmark for adherence was not met
  - Technology domain had greatest adherence
  - Organization has the lowest rate of adherence
- Qualitative themes
  - Current utilization by exception
  - Limited implementation and sustainment resources
  - Operational reliability of the network, hardware, and software
  - On-going sustainment and quality measures
  - Initial and on-going competency assessment
  - Creation and centralization of current policy and procedure

Recommendations

- **BOTTOM LINE:**
  - A standardized, evidence-based TBH program evaluation approach is needed to support continuous process improvement and alignment with the healthcare initiatives of the Military Health System and Defense Health Agency's Quadruple Aim
- **Organization**
  - Standardized, widely disseminated, and easily accessible TBH policy/SOP
- **Technology**
  - Singular TBH platform with reliable connectivity and access by both the provider and patient; readily available TBH champions and IT support resources to all end-users
- **Provider**
  - Competency assessment measures; initial and ongoing TBH training with easily accessible continuing education opportunities

Impact/Implications

- Organizational level:
  - TBH is an enduring component of an operationally ready force
  - MTF Level Recommendations
    - Policy
    - Resource optimization and sustainment
- Evidence-based TBH program evaluation
  - Outlines precision remediation at the mico and macro level to address identified gaps
  - Promotes Quadruple AIM principles, delivery of quality care, improves healthcare outcomes, increased warfighter readiness

Barriers and Limitations

- Competing operational priorities
- Management and application of available resources
- Policy development timeline
- Leader philosophy and turnover
- Broader acceptance of a standardized evaluation approach within the greater enterprise

Future Directions

- Contextual nuances influencing evaluation approach
  - Uptake
  - Standardization
  - Sustainment
  - Scalability
- Provider training and evaluation frameworks and best practices
- MHS Genesis and MHS Video Connect rollout and future BHDP interface impacts

Conclusion

- The need for a standardized evaluation approach for TBH services enterprise wide is evident
- Standardized evaluation process offers the foundation for a structured remediation and scalability to meet desired enterprise end sate
- The highest quality TBH care is the expectation, and this evaluation approach offers actionable data to actualize this objective outcome

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Thank You!

The authors would like to acknowledge our DNP Project Mentors: LTC Brent Donmoyer (Senior Mentor), Dr. Jouhayna Gebara and MAJ Shara Fisher (Phase II Site Director), for their support, guidance, and assistance. Their time, effort, and dedication to this project is appreciated more than words can express.

Fort Hood Telebehavioral Health Recommendation Handbook

Soldier Behavioral Health Service
Carl R. Darnall Army Medical Center

QUALIFYING STATEMENTS

The Fort Hood Telebehavioral Health Recommendation Handbook is based upon the best information available at the time of publication. This resource is designed to provide information and assist decision making. It is not intended to define a standard of care and should not be construed as one. Neither should it be interpreted as prescribing an exclusive course of practice management.

This resource handbook was developed by the authors to provide stakeholders clear feedback to align telebehavioral health clinical practice with established industry standards and evidence-based qualities. The findings within were assessed based the interviews with clinical supervisors and should not be used to interpret the quality of care rendered our highly qualitied behavioral health professionals.

These recommendations are designed to address the needs of the Fort Hood Telebehavioral Health Program current state on the date of publication and therefore do not reflect ongoing considerations. The views expressed within are those of the authors and do not necessarily reflect the official policy or position of the Uniformed Services University of the Health Sciences, the Department of Defense, or the United States government. Additional information on current Defense Health Agency telehealth policy can be found on the Virtual Medical Center SharePoint Site.

Version 1.0 – 2022

Disclaimers

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Introduction

A. Project overview

Telebehavioral health (TBH) is an enduring component of Army behavioral health care. This asset has been identified as a force multiplier and key to sustainment in the operational environment. This capability also has implications for efficiency, reduced stigma, and cost management (4, 16, 24). This handbook was created to complement the findings of a comprehensive telebehavioral health program evaluation. This evaluation was conducted with clinic leadership at the embedded behavioral health clinics. This project was designed and carried out by the authors as a Doctor of Nursing Practice project in conjunction with the Uniformed Services University of the Health Sciences. The authors were assigned to Fort Hood at the time of the project to fulfill graduate clinical education.

B. Project Objectives

- Synthesize current literature on organizational TBH program evaluations and develop a program evaluation approach.
- Conduct the TBH program evaluation approach at Fort Hood behavioral health clinics.
- Disseminate the TBH program evaluation results to clinics and key-leaders and formulate recommendations to promote TBH sustainment.

C. Project Design

A 23-item evaluation checklist was developed to assess program elements under three main domains: **organization**, **technology**, and **provider**. Program evaluation checklist items were scored as *not met*, *partially met*, or *met.*

Handbook Overview

Dissemination of actionable data was a core component of this project and encapsulates the purpose of this handbook. Contained within the recommendations section are the 23 individual checklist items organized under their respective domains. Detailed under each item is its respective definition, recommendation for sustainment, and associated resource supporting the recommended action. Embedded within the appendices of this handbook are excerpts from supporting resources.

A. Ongoing TBH Program Evaluation

We recommend ongoing semiannual evaluations of the Fort Hood TBH program. Periodic

on-going assessments are supported in the literature and best sustained through inclusion in organizational policy (15, 24). Reassessment should examine the same elements outlined below, with adaption to emerging organizational needs and priorities.

Recommendations

A. Organization

1.1 Culture

Item: TBH use is supported in clinic culture. Culture that supports TBH-socially defined and agreed "ways of doing," including norms, habits, and roles. (11, 13, 23).

Recommendation: Build telebehavioral health into the organization's health care access strategy and design workflows to achieve programmatic objectives that align organizational strategy and vision (1). Reinforce the utility and opportunities TBH affords the organization within staff interactions.

Resource: See II. ORGANIZATION & III. CLINICAL WORKFLOW in the SRMC Telehealth SOPs.

1.2 TBH Practice Updates

Item: TBH practice updates clearly disseminated. Mechanisms, means, and contents of disseminating information across the mental health care organization to all clinics using TBH are standardized (23).

Recommendation: Use regular communication channels (i.e., newsletters, monthly videos) to feature clinical champions showcasing innovative uses of telebehavioral health. Freely disseminate metrics on telebehavioral health utilization and practice update dashboards to front-line staff and clinical leaders on a consistent and frequent basis (1).

Resource: MHS Video Connect milSuite webpage and DHA Virtual Medical Center SharePoint webpage. These offer examples of how web-based platforms are utilized to communicate updates.

1.3 TBH Support Staff and Resources

Item: Available TBH support staff and resources. Dedicated TBH specialists and support staff

embedded within the clinics (11, 23).

Recommendation: Explore train-the-trainer models, training a few key clinical champions to subsequently train their colleagues at the EBH clinic level. Engage clinical champions as needed to communicate updates and train within their respective EBH clinic. Share stories from clinic champions, highlighting their use and successes with telebehavioral health. Train and challenge EBH clinic champions to recognize and address TBH utilization barriers at the clinic level. Administratively provide flexible training options as needed to address identified barriers.

Resource: See Staff Education and Training in the Redesigning Care guide.

2.1 Policies and SOPs

Item: Policies and SOPs are readily accessible. All policies and SOPs easily accessible (electronic and/or hardcopies) to all staff (23).

Recommendation: Create MTF level policy for TBH program. Centralize any applicable TBH related policy to the CRDAMC SBH SharePoint site.

Resource: See SRMC Telehealth SOPs for MTF level TBH policy directives & DHA Virtual Medical Center SharePoint webpage for SharePoint example of SOP & Policy consolidation.

2.2 Emergency Management Protocol

Item: Emergency management protocol available. Emergency management of patients in distress policy (10). A treatment session checklist with embedded emergency protocols should be standard (15).

Recommendation: Creation and adoption of a formal TBH specific emergency management policy at Fort Hood MTF level.

Resource: See SRMC Telehealth SOPs MTF level TBH policy directives and Suicide risk management during clinical telepractice.

2.3 Credentialing and CPGs

Item: Credentialing and associated CPGs available. TBH standards and clinical practice guidelines; specific credentialing and licensing policies (23).

Recommendation: Co-centralize applicable credentialing and CPGs with TBH associated policies on CRDAMC SBH SharePoint site. Widely recognized CPGs in the industry include the American Psychiatric Association Telepsychiatry Toolkit and the American Telemedicine Association Practice Guidelines for Video-Based Online Mental Health. Applicable state and federal credentialing requirements as determined by MTF credentialing office.

Resource: See American Psychiatric Association's Telepsychiatry Toolkit and the American Telemedicine Association (ATA) Practice Guidelines for Video-Based Online Mental Health.

2.4 Legal and Ethics Policy

Item: Legal and ethics policy available. Legal and ethical policies are adopted and accessible by all staff (11).

Recommendation: Create and adopt a TBH ethics policy. Carefully consider the ethical and safety considerations that may jeopardize the provider/patient therapeutic alliance (i.e., quality of synchronous video connection, distractions [other people, electronic devices], hazardous environments [driving], dress and appearance, and substance use). Legal considerations should be reviewed by a qualified CRDAMC JAG representative.

Resource: See SRMC Telehealth SOPs Values and Ethics. See DA Form 4700, obtained from DHA Virtual Medical Center SharePoint. See Legal Opinion Regarding Telehealth (TH) to the Patient's Home, Provider Liability and Continued Coverage under the Federal Tort Claims Act (FTCA).

2.5 TBH Expansion

Item: Policy and SOP for expansion of TBH available. Specific TBH program rollout/deployment and delivery of care policy or procedures (11, 23).

Recommendation: MTF level policy will reflect the core, enduring clinical mission of TBH to meet the dynamic demands of the greater military force behavioral health needs.

Resource: OPORD 16-27 (Army Tele-Behavioral Health Operations) Commander's Intent & Concept of Operation and OTSG/MEDOM Policy Memo 15-020 (Use of Telehealth in the United States Army Medical Command (MEDCOM)) Policy and Standards Guidance.

3.1 Mission and Vision

Item: Mission and vision clarify TBH priority. Clear vision, mission, priorities, clinical and process measures, and work plans (23) evident in organizational policy.

Recommendation: MTF level policy explicitly states vision, mission, and priorities for TBH. Clinical and process measures are identified and aligned with higher unit reporting requirements.

Resource: See Army Virtual Health SharePoint and DHA Virtual Medical Center SharePoint sites for higher mission, vision, and priorities statements.

3.2 Universal Priority

Item: TBH priority emphasized in organization mission and vision. Coherence in TBH agendas/priorities between higher echelon leadership and clinic leadership (11).

Recommendation: MTF level TBH policy mission, vision, and priorities are uniformly adopted by all clinics providing TBH care.

Resource: See I. INTRODUCTION of the AMEDD Tele-Behavioral Health Operations Manual.

B. Information Technology

1.1 IT Infrastructure

Item: Infrastructure aligns with technologic and security standards. Computers, web cameras, bandwidth, speed, internet connection, computing, encryption capability (data security and patient safety), antivirus, anti-malware, and firewall software, and data storage software (2, 11).

Recommendation: Maintain proactive approach to identification and remediation of emerging IT infrastructure barriers. Consider a centralized repository of IT workorders to ensure effective and efficient remedy of identified barriers. Maintain collaborative relationships with local IT support staff.

Resource: See DHA Virtual Medical Center SharePoint work order workflow.

1.2 Physical Space

Item: Physical space available and appropriate for TBH care. Availability of offices, space, and

relevant TBH equipment (13, 23). All clinic staff that may be required to perform TBH operations in a deployed setting should have the same TBH setup, operations, and troubleshooting (16).

Recommendation: Sustain appropriate physical workspace to support TBH mission. Critical to scalability and fixability to meet operational demands, all MEDCOM BH providers will maintain access to necessary video teleconferencing equipment at all times.

Resource: See Policy in OTSG MEDOM Policy Memo 15-020.

2.1 Cross Compatibility

Item: Infrastructure cross compatibility evident. Systems compatible and cross communicate with each other (23).

Recommendation: Support adoption of single video teleconferencing platform, MHS Video Connect. MTF level policy will indicate MHS Video Connect as the platform for synchronous video teleconferencing. MTF Policy should direct phase out of legacy VTC platforms (Google Duo, Adobe Connect, Facetime, etc..).

Resource: See MHS Video Connect Peer Expert Training product v5.1, March 2022.

2.2 Safeguards

Item: Single sign on and two factor authentication (2FA) is present. Single sign-on technology and intelligent portal design (23); 2 factor authentication (2).

Recommendation: Legacy synchronous video teleconferencing platforms did not require a 2FA process to initiate a virtual encounter. Standardization under a secure service, such as MHS Video Connect, will allative this security concern for the patient and the provider.

Resource: See MHS Video Connect Peer Expert Training product v5.1, March 2022.

3.1 IT Support

Item: IT support available. Access to IT experts to troubleshoot user issues (23).

Recommendation: Sustain access to Global Service Center for prompt remediation of IT issues. Consider logging feedback from providers to identify modifiable variables that can be addressed in future training encounters.

Resource: See MHS VC Help (Slide 99) in the MHS Video Connect Peer Expert Training product v5.1, March 2022.

3.2 Operability Manual

Item: Clear user operability manual available. Clear instructions on how to access and utilize TBH system (23).

Recommendation: Identify all applicable user manuals for TBH required hardware and software applications. Centralize these products in a widely available repository (i.e., SharePoint). Consider ongoing standard operating procedures to ensure products are maintained up to date.

Resource: See Army Virtual Health SharePoint and DHA Virtual Medical Center SharePoint for live examples.

3.3 Contingency Plan

Item: IT contingency plan available. Clinical workflow contingency plans for technology failures (e. g. if the camera doesn't work, move to phone call, if phone call isn't feasible, schedule face-to-face appt etc.) (23).

Recommendation: MTF level policy explicitly outlines troubleshooting steps the provider should take in the event that disruption of connectivity occurs.

Resource: See Technical Troubleshooting in the DoD Telemental Health Guidebook.

C. Provider Competency

1.1 Competency Assessment

Item: Competency assessment available. Specific TBH competency checklist and assessment needed for every provider delivering TBH services (13, 23).

Recommendation: Adopt MHS Video Connect Provider Competency Assessment into MTF level policy guiding the assessment verification of BH providers. Consider Fort Hood specific nuances in assessment verification process.

Resource: See the MHS Video Connect Provider Competency Assessment Checklist.

2.1 New Employee Training

Item: Formal initial training and simulation in place. Training modalities: formal education, credentialing, peer group learning, high fidelity TBH simulation training (8, 13, 23).

Recommendation: Standardize new BH provider training to ensure elements of local MTF policy are trained and assessed by established competency measures.

Resource: See Training in the SRMC Telehealth SOPs & MHS Video Connect Provider Competency Assessment Checklist.

2.2 Clinical Indicators

Item: Provider educated to clinical indicators for TBH use. Training content: Technical and therapeutic training, TBH benefits and utilization to routinely offer TBH to overcome patient barriers when assessed (8).

Recommendation: Establish clinical indicators for TBH use within the MTF level policy.

Resource: See SOP examples on the DHA Virtual Medical Center SharePoint site.

3.1 Provider Satisfaction

Item: Instrument to measure factors influencing attitude and intent to use available. Valid and reliable instruments to measure factors influencing attitude and intent to use. For example, constructs from the Uniformed Theory of Acceptance and Use of Technology and the Technology Acceptance Model can be transformed into questionnaire format to measure provider attitude and intent to use TBH in their clinical practice (12).

Recommendation: Consider the adoption of a compressive satisfaction and usability scale for incorporation into ongoing TBH program assessments. The Telehealth Usability Questionnaire (TUQ) is designed to be a comprehensive questionnaire that covers all usability factors, including usefulness, ease of use, effectiveness, reliability, and satisfaction.

Resource: Table 1 in Development of the telehealth usability questionnaire (TUQ).

3.2 Experience

Item: Providers have experience with TBH care delivery. Experience with TBH technology (13,

23).

Recommendation: Include specifications for a provider repository for documentation of provider competency and experience using TBH.

Resource: See Training in the AMEDD Tele-Behavioral Health Operations Manual.

3.3 Provider Acceptance

Item: TBH as a method of care delivery valued and accepted by providers. TBH value and acceptance by staff and providers (11, 13, 23), performance and effort expectancy, social influence, and facilitating conditions [UTAUT/TAM framework] (12).

Recommendation: Consider sharing provider success stories of TBH use, highlight utility periodically at venues with the greatest end user reach, consider incentives for use, and consider protected training time to sustain utilization.

Resource: See Staff Education and Training (p. 20) in the Redesigning Care guide.

Appendix A: AMEDD Tele-Behavioral Health Operations Manual (21)



U.S. ARMY MEDICAL COMMAND

TELE-BEHAVIORAL HEALTH OPERATIONS MANUAL

1 MAY 2012

I. INTRODUCTION

1. The Behavioral Health System of Care (BHSOC) seeks to ensure optimal utilization of scarce Behavioral Health (BH) resources through standardization of BH programs related to the Army Force Generation (ARFORGEN) cycle. In concert with this aim, this U.S. Army Medical Command (MEDCOM) Manual provides Regional Medical Commands (RMCs) and Medical Treatment Facilities (MTFs) with a single, MEDCOM-endorsed manual for participating in synchronous (e.g. real-time clinical video-teleconferencing) Tele-Behavioral Health (TBH) activities in garrison. Specifically, the provisions herein represent a standardized set of optimized common procedures, resources, and practices for participating in synchronous TBH in garrison. The Army TBH community reviewed and incorporated the American Telemedicine Association's (ATA) Practice Guidelines for Videoconferencing-Based Telemental Health in this Manual where applicable. RMCs and MTFs are required to provide their own standard operating procedures (SOPs) as Annexes to this document; minimum requirements for these SOPs are described herein and may augment but not detract from the procedures described in this Manual. As this MEDCOM TBH Manual documents the common procedures and requirements necessary to operate the current TBH system, it is intended to fulfill this part of the Concept Plan requirements laid out in the BHSOC OPORD 11-70 Annex Q (FRAGO 3).

2. The Army Medical Department (AMEDD) offers TBH services to achieve the following goals:

a. Allow the Army to leverage providers among MTFs and across RMCs to support surges and unforeseen service requirements;

b. Reduce the stigma of accessing BH services by creating access to providers that are geographically separate from local MTFs and, therefore, do not have interaction with patients outside of the encounter;

c. Increase access to care by providing services to MTF catchment areas that have limited direct care capacity, limited TRICARE network capacity, and/or lack of access to subspecialty care on installations or in the TRICARE network;

d. Provide cost-effective, comprehensive, efficacious, and timely access to quality outpatient BH care regardless of the patient location;

e. Conserve fighting strength; and

f. Increase Readiness.

3. These Services are offered in coordination with various entities, including but not limited to the AMEDD Telehealth Office (ATHO); the Behavioral Health Division (BHD); the Office of the Chief Information Officer (OCIO); the Telemedicine and Advanced Technology Research Center (TATRC); and MEDCOM.

4. TBH is evolving and, therefore, this is an evolving document. RMCs are encouraged to submit their comments, suggestions, or observations to ATHO and BHD to be considered for inclusion. ATHO and BHD will review the Manual contained herein on at least an annual basis. RMC and MTF Commanders will do the same to ensure that individual MTF SOPs are in compliance with this document.

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III. OPERATING PROCEDURES

1. Values and Ethics

Army Medicine values include loyalty, duty, respect, selfless service, honor, integrity, and personal courage. TBH providers and staff will strive to uphold these values in all aspects of the provision of TBH services. Additionally, all providers and staff engaged in the provision of TBH will adhere to the Standards of Conduct prescribed by Department of Defense Directive (DODD) 5500.07 and all related regulations. TBH providers will be aware of and adhere to medical and other professional discipline codes of ethics when using telehealth.

2. Definitions

Telehealth is a capability encompassing the policies, processes, organization, products, systems, and services that support the delivery of health care at a distance via electronic communications. Telehealth facilitates the distribution of electronic health information, services, and education between providers and/or providers and patients. Telehealth in the AMEDD is governed by the Office of the Surgeon General (OTSG)/MEDCOM Policy Memorandum 11-005, Use of Telehealth in AMEDD Table of Distribution and Allowances (TDA) Facilities.

The term "telehealth" (TH) indicates an inclusion of all health professionals and support staffs. The term "tele-Behavioral Health" (TBH) is the practice of Behavioral Health specialties at a distance.

Synchronous, or real time, telehealth encounters transmit medical information in at least two directions in the same time period via electronic communications. A common type of synchronous encounter is clinical video-teleconferencing. Clinical video-teleconferencing supports the delivery of health care at a distance via real-time, two-way transmission of digitized video images between two or more locations. Providers connected to patients or other providers using clinical video-teleconferencing can exchange medical information for the purpose of obtaining an expert opinion; diagnostic support regarding the care of a patient; direct patient care; and patient and/or provider education and training. In the process of clinical video-teleconferencing, the remote consultant may interact directly with patient(s), provider(s), staff member(s)/escort(s), family member(s) and/or other designated representative(s), and/or other entities involved in education. Clinical video-teleconferencing can be accomplished using video-conferencing technologies certified for provider-to-provider, provider-to-patient, or educational encounters.

Although this Manual pertains to synchronous TBH in garrison, a definition of asynchronous encounters places synchronous encounters in context. Asynchronous, or store and forward, telehealth encounters transmit medical images or information in one direction in time via electronic communications. A common type of asynchronous service includes teleconsultation. Teleconsultation supports the delivery of health care at a distance via the asynchronous transmission of electronic medical information and associated or stand-alone digital images over a secure connection between healthcare providers for the purpose of obtaining an expert opinion or diagnostic support regarding the care of a patient. In the process of teleconsultation, the remote Consultant does not interact directly with the patient. The Consultant prepares and transmits comments, recommendations, or an official interpretation back to the referring provider for their review and consideration. A teleconsultation can be accomplished using web-based technologies, or under special circumstances, using email systems that include de-identified patient data. A teleconsultation is not a telephone consultation between providers or a traditional patient referral where the consulting provider assumes responsibility for patient care.

3. Scope of Practice

The RMC TBH Services provide comprehensive outpatient care to include diagnostic and therapeutic modalities within the capabilities and resources of the RMC. Additionally, the RMC coordinates with MEDCOM and other RMCs to access their capabilities and resources in the provision of these services. Services are made available by credentialed providers privileged at both the patient and provider sites. Licensed clinical providers are responsible for the non-licensed providers they supervise. There are usually no age restrictions on patients, although additional clinical practice guidelines should be considered for certain categories of patients (i.e., Child and Adolescent Services). RMC and MTF TBH staff will ensure that appropriate staff is available to meet patient and provider needs before, during, and after TBH encounters of all types.

Services are offered to all supported MTFs that meet requirements within the RMC and among other RMCs upon request. The MEDCOM requirements are outlined in this Manual; other RMC-specific requirements are to be found in the RMC Annex.

4. Range of Services

a. The following are appropriate services to be offered via TBH:

1) Evaluation, diagnosis, and treatment of psychiatric disorders, neuropsychological disorders, addiction medicine, and BH-related medical disorders as outlined in the Diagnostic and Statistical Manual of Mental Disorders-IV-TR (DSM IV-TR) and International Classification of Diseases (ICD 9/10). Other medical diagnoses related to BH may also be addressed through this modality as well (obesity, pain, substance abuse and dependence, etc).

2) Treatment modalities include but are not limited to individual (short-term and intensive), marital, family, and group psychotherapies; behavioral medicine interventions; medication management; and psycho-educational training.

3) Psychological testing for differential diagnoses and facilitation of treatment.

4) Consultative services to primary care or other specialty care providers.

5) BH referrals generated from Soldier Readiness Processing (SRP) / Reverse SRP evaluations.

6) Case management services.

7) Professional training and supervision provided for continuing medical education (CME) and/or graduate, post-graduate or undergraduate rotations, graduate medical education (GME), or Health Professions Education (HPE).

8) Administrative evaluations.

9) Forensics.

10) Distance learning.

11) Cognitive testing.

12) Medical Evaluation Board evaluations.

b. In accordance with OTSG/MEDCOM Memo 11-005, TH capabilities can be used for Resource Sharing Agreements between Veterans Affairs/Department of Defense (DoD) and academic universities whenever supported by a business case analysis. However, before TBH services are exchanged, a formal written agreement approved by MEDCOM OSJA/TSG/designee is required.

c. Services may be provided to the following populations:

1) **Adults:** This Service provides quality Behavioral Health care to beneficiaries ages 18 and up, with occasional age exceptions at the discretion of the tele-provider. Support may be provided to facilities as allowed by OTSG/MEDCOM Policy Memo 11-005.

2) **Children and Adolescents:** This Service provides quality Behavioral Health care to beneficiaries ages 17 and under, with occasional age exceptions at the discretion of the tele-provider. Support may be provided to facilities as allowed by OTSG/MEDCOM Policy Memo 11-005.

5. Access to Care

a. **Hours of Operation:** TBH Services are typically available for routine outpatient care during normal business hours, local time, Monday through Friday with the exception of national holidays and hospital-directed holidays or activities. Training holidays may not necessarily alter appointments at the supported sites. Due to the expanding nature of TBH, extended hours, including weekends, may be required to meet assigned missions. RMC and MTF Commanders will determine availability of emergency services via TBH (i.e. patient presents as an emergency, as opposed to a patient decompensating during a routine TBH appointment and the situation becomes an emergency). Please see RMC/MTF Annexes.

b. **Method of Access:** At the RMC's discretion each MTF may allocate specific blocks of appointments that will appear in the comments section of the Armed Forces Health Longitudinal Technology Application (AHLTA). These blocks will be negotiated with the MTF in advance. Patients at sites within the RMC obtain TBH appointments according to each clinic's SOP.

c. **Appointment Access Times:** In general, routine appointments should be opened on a continuous basis to ensure MTFs maintain a 45-day rolling calendar of available appointments. Patients are scheduled with a new appointment whenever they see a provider within the RMC TBH Service for the first time. Subsequent appointments with the same provider are scheduled as follow-up appointments. Access to care varies by patient acuity, and patients should obtain a routine new appointment within the MHS and MEDCOM access standards.

RMCs may consider allowing MTFs to designate a block of time dedicated to their facility; the TBH Provider Template for that site could be developed within the Composite Health Care System (CHCS) with that MTF's name identified in the "Comments Slot." The MTF can then book appointments directly into the TBH Provider's schedule.

d. **Options when Appointments are Full:**

1) If new TBH Service appointments for a particular service are not available within the above-stated access standards, patients should be referred to their local MTF for

TRICARE network options depending on their status, i.e., active duty, dependents, or retiree. RMC TBH Service staff will ensure the patient obtains the appropriate level of care and coordinates with the supported MTF BH Clinic regarding the referral.

2) If patients are already being seen within a specific TBH Service and cannot obtain a follow-up appointment consistent with their treatment plan, MTFs will coordinate with the appropriate RMC TBH Service staff to resolve the issue and obtain an appointment within the time period specified in the patient's treatment plan.

3) If MTFs designate a block of time and the demand for services exceeds their block of allocated time, MTF staff should coordinate with the appropriate RMC TBH Services staff to explore the option of expanding their allocation. There may be TBH providers assigned to other MTFs within their RMC or assigned to other RMCs that can provide additional capacity as required. If the required capacity is unavailable within the RMC, or if the RMC desires cross-regional support for other reasons, the RMC TBH Services staff can request external TBH provider support from other RMCs through OTSG Operations.

6. Support from MTFs

a. MTFs scheduling new patients are required to submit appropriate documentation to the specific RMC TBH Service prior to the patient's first appointment. Documentation requirements for clinical services are as follows:

1) The first document to be submitted is the Patient Intake Form. MTFs may use their own Intake Form either paper-based or, if applicable, internet-based.

2) The MTF will also ensure that the patient completes the forms appropriate to the encounter. Specifically:

i. Substance abuse only patient seen through TBH:
   1. Limits of Confidentiality form (DA 8001)
   2. MEDCOM Overprint (OP) Form 45 (Medical Record – Consent Form – Authorization to Receive or Record Telehealth Services) or state-mandated consent

ii. BH only patient seen through TBH:
   1. Limits of Confidentiality and Informed Consent form (MO 44)
   2. OP 45

3) If applicable, the patient should also complete MEDCOM OP 45 for recording at the supported MTF.

4) MEDCOM OP 45 should be scanned into AHLTA either as an "Add Note" or in the "Clinical Notes" module.

5) Other documents may be required; these are described in the RMC/MTF Annexes.

b. TBH providers and local MTF staff are responsible for screening patients for the use of TBH, following local procedures. TBH patients requiring levels of care not offered by this outpatient modality are referred to their local MTF by the TBH provider for appropriate referral. For a BH patient requiring hospitalization, the local MTF will follow its local protocol for psychiatric

admissions to either military or civilian facilities. A copy of this protocol, as well as an explanation of how it pertains to TBH as appropriate, can be found in the MTF Annex. Where provider-to-provider coordination is required during the admission process, the TBH Provider will coordinate directly with the TRICARE approving authority if applicable. The protocol for coordinating with the appropriate TRICARE approving authority(s) can be found in the RMC Annex.

c. Supported MTFs will provide the Regional Medical Center Staff with a packet of information regarding local community services, resources, level-of-care criteria. TBH providers can then provide this information to patients from that MTF as needed. It is recommended that supported MTFs update this packet of information every year.

d. Please see RMC Annex for any additional requirements.

7. Referral Guidelines

The RMC TBH Service may accept referrals from all sources to provide services to eligible beneficiaries. These referrals include but are not limited to self-referral, Command referrals IAW DoDD 6490.1, DoD provider referrals, and civilian provider referrals.

a. DoD providers may refer patients by telephone or by completing a Consultation Sheet (Standard Form (SF) 513). If an SF 513 is used, the provider will complete the SF 513 as appropriate and post it in AHLTA.

b. Non-DoD civilian providers (e.g. network PCMs) may refer patients using the standard process. Civilian provider referrals must include a patient's signed release form allowing for consultation with the civilian provider(s) to gather background information. The patient release will also include consent to release information back to the civilian provider if the plan is for the civilian provider to resume patient care following the TBH consult.

8. Case Management

The RMC Telehealth Services staff should assist both MTFs and patients in the following areas:

a. Assisting patients with obtaining intradepartmental appointments at the patient site's MTF to facilitate continuity of care.

b. Providing patients with information regarding local community services, resources, and level-of-care criteria generated by the supported MTF.

c. Coordinating with other case managers and/or Warrior Transition Units (WTU) to access the appropriate service area.

9. Prescription and Laboratory Guidelines

a. Prescriptions are to be placed in CHCS/AHLTA. Each prescribing provider should obtain a CHCS password for each MTF that is currently supported under a different IT platform. The patient must be registered at the consulting providers' (distant location) MTF; the consulting/prescribing provider enters the prescription information in AHLTA and annotates in the encounter note that a medication adjustment was made. The pharmacy at the patient MTF should have visibility of the medication adjustment. The provider must make arrangements to

have the original prescription sent to the supported pharmacy in the most expedited means possible if a Schedule 2 medication is prescribed; if AHLTA host issues occur due to a lack of connectivity or incompatibility; or if the provider is unable to access the supported MTF CHCS platform. Required Controlled Substance Act Criteria for scheduled medication administration must be followed. Medication management must comply with the appropriate guidelines established by the RMC Hub, supported MTF, and the governing professional organization (e.g., the American Psychiatric Association, AACAP).

b. Laboratory orders are to be placed into CHCS/AHLTA. Each prescribing provider should obtain a CHCS password for each MTF that is currently supported under a different IT platform. Ordering of laboratory orders must comply with the appropriate guidelines established by the RMC Hub and the supported MTF.

10. Clinical Specifications

The following clinical specifications should be adhered to, ensuring that local protocols are followed.

a. Clinical Research studies/trials have documented that TBH is a standard of care. MTF Commanders and TBH providers will ensure that the standard of care delivered via TBH is equivalent to any other type of care that can be delivered to the patient/client, considering the specific context, location and timing, and relative availability of in-person care. Peer review, as well as, quality improvement and performance management processes, at the RMC and MTF levels are integral parts to ensuring that TBH is meeting the relevant standard of care.

b. Patients receiving BH services are afforded a higher degree of patients' rights, and organizational responsibilities are heightened. MTF Commanders and TBH providers will ensure that these additional responsibilities are achieved in the provision of TBH.

c. TBH providers are responsible for maintaining professional discipline and utilizing clinical practice guidelines in the delivery of care in the TBH setting, recognizing that certain modifications may need to be made to accommodate circumstances. Any modifications to BH clinical practice standards for the telehealth setting will ensure that clinical requirements specific to BH are met.

d. Where guidelines, position statements, or standards from a professional organization or society such as (but not limited to) the American Psychiatric Association, American Psychological Association, National Association of Social Workers, or American Academy of Child and Adolescent Psychiatry (AACAP) exist, it is advised that BH professionals review these documents and incorporate them into practice when appropriate.

e. Standard practice guidelines for therapy will direct psychotherapy services within the TBH setting. Evidence-based practice and empirically supported treatments will be followed and adapted by the TBH provider as appropriate for clinical video-teleconferencing. Providers engaged in providing psychotherapy services via telehealth will be aware of their professional organizations' positions on TBH and incorporate the professional association standards appropriately.

f. TBH providers and supporting staffs must have the necessary education, training/orientation, and continuing education/professional development to insure that they possess the necessary competencies for the provision of quality health services. Please see section on Training as well as Licensing, Credentialing, and Privileging.

g. TBH clinicians should have cultural competency in the population served. The TBH provider must be aware of possible cultural differences among providers, patients and staff. This includes cultural differences in sister DoD Services, VA and Civilian partners. RMC and MTF TBH staff will assess the difference between provider's and patient's sites in planning for and managing ongoing services and notify/change the practitioner should additional cultural competencies be needed.

h. TBH providers will ensure that all persons in the exam rooms at both sites are identified at the beginning of the consultation. Disclosing the identity of persons who are attending the consultation will be done by announcing the presence of individuals present and asking the patient's permission for additional persons to be in the room or, where practicable, panning the exam rooms at both sites with the video camera. Permission from the patient is not required if safety concerns mandate the presence of another individual or if the patient is being legally detained but permission should be encouraged by the practitioner.

i. TBH clinicians will be aware of the impact of TBH on their perception of control over the clinical interaction, and how this might influence their management of the patient. TBH clinicians must be cognizant of safety issues with patients displaying strong affective or behavioral states upon conclusion of a session, and consider how patients may then interact with remote site staff.

j. TBH providers will ensure that clinical video-teleconferencing procedures for the evaluation and treatment of youth follow the same guidelines presented for adults with modifications to consider the developmental status of youth, such as motor functioning, speech and language capabilities, and relatedness. When legally required, the TBH provider will inform families when a TBH appointment is scheduled for their child, in order to prepare their child for a clinical video-teleconferencing appointment. The care and the clinical procedures used with children will follow the practice parameters developed by the AACAP. Additional space recommendations are contained in the section on Space Requirements.

k. Cognitive and psychological testing may be provided via TBH but may need to be modified to use via video. TBH providers will be aware of the properties of the individual test instrument, how it may be impacted by clinical video-teleconferencing, and potential needed modifications. Computer-based testing may be provided at the patient site and results securely transmitted to the TBH provider for scoring and interpretation. On-site testers are appropriate to be used for cognitive testing, and the RMC TBH Service will ensure that ancillary staff are available to administer cognitive testing and share results with the TBH provider, as required.

11. Patient Safety and Risk Management

a. Patient safety is of utmost importance. Treating a patient via telehealth requires additional safety measures including but not limited to some modifications in clinical operations.

b. There are no absolute contraindications to patients being assessed using TBH modalities. The inclusion of cases for a TBH consult is at the discretion of the referring and consulting clinicians subject to limitations placed by RMC and MTF Commanders and TBH staff based on available resources and/or clinical discretion. Please see the RMC/MTF Annexes for any limitations.

c. Per OTSG/MEDCOM Policy Memo 11-005, when telehealth is utilized by an RMC and/or MTF, Commanders will ensure that MTFs employ emergency management protocols for all telehealth encounters involving patient interaction and that tele-providers are familiar with these procedures.

MTF Commanders should ensure that all applicable staff are familiar with these procedures as well.

d. To develop emergency management protocols, RMC and MTF TBH staff will undertake a patient site assessment that includes obtaining information on local regulations and emergency resources, and identification of potential local collaborators to help with emergency management. Protocols will include a clear explanation of roles and responsibilities in emergency situations, determination of outside clinic hours for emergency coverage (if any), and guidelines for determining at what point other staff and resources should be brought in to help manage emergency situations. Protocols will also establish the need for a designated licensed provider with published contact information that is available at the site where the service member is located. Supported MTF staff will ensure that the TBH Services providers have points of contact (POCs) with current telephone numbers identified, and that at least one of the POCs on this list will always be positioned and available to respond to a patient in crisis at the supported MTF (i.e. the patient site). TBH providers should have access to Command contact information for AD patients.

e. MTF staff will ensure that emergency management protocols for TBH encounters at the patient site are understood by the TBH Service provider offering care to that site. MTF staff should be familiar with these protocols. Unless otherwise specified, these emergency management protocols are the same as the MTF's existing procedures for managing out-of-control or decompensating patients. The MTF's emergency management protocols will be immediately applied at the telephone request of the TBH Services provider. For example, if a patient becomes "out of control" and the MTF's normal response is a "show of force," then that same procedure would apply to TBH patients. Please refer to the MTF Annex, which specifically describes roles, responsibilities (i.e. daytime and after-hours coverage), communication, and procedures around emergency issues at the local MTF.

f. If a patient requires hospitalization, the TBH Services provider will coordinate with the MTF staff to follow MTF procedures for admitting a patient. MTF staff will ensure that TBH providers are aware of local civil commitment regulations as applicable. Since TBH providers will usually not have admitting privileges at the patient's hospital, the Soldier/patient would be transferred to their local MTF and a designated licensed and privileged BH provider for admittance or necessary follow up care. Please refer to the RMC and MTF Annexes for more information on local protocols for psychiatric admissions to either civilian or military facilities, local civil commitment regulations, and a protocol for coordinating with the appropriate TRICARE approving authority should physician-to-physician coordination be required during the admission process.

g. Per OTSG/MEDCOM Policy Memo 11-005, trained staff will be available in the immediate area of the encounter rooms to institute emergency management protocols if necessary. Additionally, a supported clinic should have a credentialed provider on site that can intervene in the case of an emergency. If a clinic does not have a credentialed BH provider in the immediate area, then they must coordinate with a nearby credentialed medical professional to assist as required. There may be an occasion where the TBH provider is the only available BH clinician. To prepare for these instances, RMC TBH staff must ensure that a formal procedure is established between the RMC TBH Service and that particular MTF to handle non-routine cases. The need for a credentialed provider is contingent on the services rendered. Not all TBH encounters are related to the provision of direct clinical care and may be more administrative or educational in nature; therefore, a credentialed provider in the vicinity is not needed in these cases, though emergency POCs are always needed. In the event clarification is required for the purpose of determining

whether a credentialed provider must be on site, RMC/MTF telehealth staff in coordination with Behavioral Health Division, AMEDD Telehealth Office, Staff Judge Advocate, and Quality Management Division will determine if an encounter is clinical, administrative, or educational in nature.

h. There are two use cases of note for emergency TBH services. The first use case is a situation in which a patient decompensates during a routine TBH appointment and, while not originally an emergency, the situation becomes an emergency. The second use case is a situation in which a patient presents at the clinic as an emergency case (e.g. for an emergency evaluation). To protect the patient and others in the first use case, all MTF Commanders will ensure that MTFs employ emergency management procedures as described above and in the MTF Annex. However, not all clinics offering TBH will allow the second use case. If RMC and MTF Commanders decide to allow the second use case, then the MTF SOP will also provide written protocols to support this type of emergency TBH service. In an emergency evaluation, TBH clinicians and staff will pay special attention to the enhanced need for privacy and confidentiality. Every attempt to preserve the right to privacy will be employed.

i. Permission from the patient for including additional persons in the room is not required if safety concerns mandate the presence of another individual or if the patient is being legally detained. However, permission from the patient should be encouraged by the practitioner.

j. Continuity of care is of special concern in TBH encounters to ensure the safety of patients and those around them. MTF SOPs will contain clearly defined roles, responsibilities, and procedures around patient safety issues related to continuity of care (e.g. procedures a tele-provider should follow if they determine that a patient requires a face-to-face encounter or other in-person attention for safety reasons).

12. Licensure

a. The 2012 National Defense Authorization Act (NDAA) included language, commonly known as the Servicemembers' Telemedicine and E-Health Portability (STEP) Act, that changes the licensure requirements for certain federal providers. However, until DoD and Army implementing guidance is released, current policies will remain in effect. This TBH Operations Manual will be revised as new guidance comes out.

b. Licensure regulations in AMEDD Telehealth are governed by 10 USC§1094(d), DoD 6025.13-R, and AR 40-68. All providers must comply with licensure regulations as stated therein for all telehealth modalities and technological platforms. Licensure, credentialing, and privileging requirements are summarized by OTSG/MEDCOM Policy Memo 11-005, Use of Telehealth in AMEDD TDA Facilities.

c. When providing synchronous (real-time) electronic-supported encounters, the health care provider must be licensed in both the U.S. jurisdiction where the provider is located and the U.S. jurisdiction where the patient is located. This requires dual licensure for any encounters across state lines and other U.S. jurisdictions (i.e. territories, possessions, Commonwealths, and the District of Columbia). Without dual licensure, providers are practicing medicine in a state or other applicable U.S. jurisdiction without a license, creating potential liability.

d. Some categories of providers are exempted from these licensure requirements in certain situations. Active Duty (AD), Department of the Army Civilian (DAC), and Personal Services Contract (PSC) providers do not require dual licensure for synchronous telehealth encounters

with a patient as long as provider and patient are both on federal property or a reserve component (RC) facility under federal jurisdiction. For a synchronous telehealth encounter with a patient, when an AD provider and/or patient are at an authorized location not on federal property or RC facility under federal jurisdiction, the provider requires licensure in any U.S. state or territory.

e. However, some categories of providers require dual licensure in certain situations. DAC, PSC, and TRICARE network providers require dual licensure for synchronous telehealth encounters with a patient when providers and patients are not both on federal property or a RC facility under federal jurisdiction. Non-Personal Services (NPS) Contract providers must be dual licensed anytime the patient and provider are not in the same state or other appropriate U.S. jurisdiction.

f. In summary, Annex B to OTSG/MEDCOM Policy Memo 11-005 outlines common licensure scenarios with which providers must comply, as follows:

    1) Synchronous telehealth encounter with a patient –AD, DAC or PSC provider and patient are both on federal property or reserve component facility under federal jurisdiction.

        – Provider requires licensure in any US state or territory.

    2) Synchronous telehealth encounter with a patient – NPS Contract provider and patient are both on federal property or reserve component facility under federal jurisdiction.

        – Provider requires licensure at the location of the provider as well as the location of the patient.

    3) Synchronous telehealth encounter with a patient –DAC, PSC or NPS Contract provider and/or patient not on federal property or reserve component facility under federal jurisdiction.

        – Provider requires licensure at the location of the provider as well as the location of the patient.

    4) Synchronous telehealth encounter with a patient – AD provider and/or patient at authorized location not on federal property or reserve component facility under federal jurisdiction.

        – Provider requires licensure in any US state or territory.

    5) Synchronous telehealth consult between AD, DAC, PSC, or NPS Contract providers without patients – providers at any location.

        – Provider requires licensure in any US state or territory.

g. It is of special importance to note the physical location of the provider and patient in synchronous patient encounters via TBH. With the proliferation of portable clinical video teleconferencing (VTC) equipment such as the Tandberg MOVI camera, care must be taken to prevent the provision of TBH care from unauthorized locations and strictly adhere to the licensure provisions as set forth in OTSG/MEDCOM Policy Memo 11-005. Preferably, care would be provided in a TBH clinic setting.

13. Malpractice Insurance Requirements

a. AD, DAC, and PSC health care providers are not required to obtain medical malpractice liability insurance.

b. Under NPS contracts with business entities, medical malpractice liability insurance is a requirement.

14. Credentialing and Privileging

a. All telehealth programs will comply with AR 40-68 and standards of The Joint Commission (TJC). AR 40-68 supersedes local policy and procedure.

b. Providers who write orders or direct care, treatment, or services via telehealth must be privileged at both facilities – the one providing and the one receiving the service. This is facilitated by use of the Interfacility Credentials Transfer Brief (ICTB) along with a copy of the provider's delineation of privileges. The MTF receiving the service should privilege the provider only for the telehealth services the MTF receives. Types of services requiring privileges include all clinical video-teleconferencing services and any other direct provider-patient interactions.

c. Providers who provide official reading and interpretation of images, tracings, or specimens do not require privileges at the receiving facility. In such cases, the facility must obtain and maintain a copy of the ICTB and delineation of privileges from the provider's home MTF but need not privilege the provider.

d. The use of Centralized Credentials Quality Assurance System (CCQAS) is mandatory for all Army MTFs and will be encouraged for use by other supported locations outside of MEDCOM.

e. Telehealth providers who are physically located outside the RMC Hub (where applicable) should be cross-credentialed as required to ensure maximum productivity and ability to address surge support.

f. Externs, interns, residents and fellows as defined by being part of a MEDCOM provider training program engaged in TBH services are supervised by a licensed provider within their respective training programs and therefore are not privileged at the supported MTF. Supervising practitioners will comply with state and federal requirements for in-person supervision for residents and other practitioners whose positions are federally or state funded. Supervisors must hold clinical privileges for the service being delivered at the supported MTF.

g. The TBH Hub will ensure a Provider Activity Folder (PAF) and/or a Competency Assessment File (CAF) is maintained for all TBH providers and staff. The contents of that folder will include, at a minimum, certificates of all applicable trainings, credentialing approval letters for each MTF, and other documents as outlined by the Regional Hub. TJC's Ongoing Professional Practice Evaluation (OPPE) will also be maintained in the credentialing file for all providers. Where possible, these documents will be maintained in CCQAS and made available to supported MTFs.

15. Informed Consent

a. TBH providers will comply with specific consents to treat and for medication administration that apply to the area of BH. Supported MTFs will put into place procedures in their SOPs for

obtaining and sharing consents for BH treatment and services in support of patient encounters conducted via TBH, as well as procedures for refusals to sign consent forms.

b. According to AR 40-68, Clinical Quality Management, telemedicine encounters require written informed patient consent before the use of said technology. MEDCOM Supplement 3 to AR 40-66, Medical Records Administration and Healthcare Documentation, further governs the use of informed consent for clinical telehealth encounters. Specifically, for synchronous clinical telemedicine encounters with a patient, MEDCOM OP 45 will be used to meet the telehealth authorization for counseling and/or for inpatient /outpatient medical/dental care.

c. MEDCOM OP 45 does not replace State-mandated telemedicine consent forms or OF 522 (Medical Record-Request for Administration of Anesthesia and for Performance of Operations and Other Procedures) requirements for portions of the encounter that do not involve telemedicine. For example, a clinical provider-patient synchronous encounter via telemedicine would require a patient to be given a MEDCOM OP 45 and any other requirements as needed for that specialty (e.g. OF 522 for surgical procedures). Local consent forms will not be used in place of MEDCOM OP 45. An electronic form containing the data elements of MEDCOM OP 45 may be used. Providers will be aware of and follow obligations to verbally consent patients as well.

d. If a telemedicine encounter with a patient is videotaped, then consent will also be recorded on MEDCOM OP 45. In most cases, the only reason to consider recording the healthcare episode is to capture information that has compelling educational value. Written informed consent is not required if the video-capture is for the documentation of negligence or abuse.

e. Should TBH be used for research purposes, attention will be paid to issues of confidentiality and informed consent in Institutional Review Board documents, ensuring that patients who are involved in research trials via telemedicine understand consent is for the purposes of research and not for receiving care via TBH. Please also see section on Use of TBH for Research.

f. Patient Administration or other clinical staff should scan informed consent into the electronic medical record once obtained.

16. Record Management

a. The same standards for accuracy, completeness, and safeguarding of records apply to TBH Services records as to the records of patients seen face-to-face. Similarly, the same access restrictions and processes for the retrieval of records apply to TBH Services records as to the records of patients seen face-to-face.

b. Generally, AHLTA notes are the only acceptable method of documenting patient care. Specifically, in accordance with OTSG/MEDCOM Policy Memo 11-005, the content and outcomes of the patient encounter are documented in the electronic medical record and archived within AHLTA. Paper-based records or other alternative information systems can be used in cases where the electronic health record is not available or does not permit the provider to fully document a synchronous encounter (both data and digital images). Medical information generated from telehealth is part of the medical record in the facility rendering the service to the patient.

c. To more fully document an encounter, automated BH records may also be used if available. Convenience files may be maintained by the provider in accordance with an MTF's established

SOP. When the RMC TBH Services engage in research, fully approved by the RMC's Department of Clinical Investigations (DCI) and further consented by both the MTF and the patient involved, the research protocol will articulate precise record-keeping protocols and security methods. All research must comply with the institutions' IRB policy.

d. All clinical notes will be placed in AHLTA within 72 business hours of the completed appointment to enhance quality of care and patient safety by providing a timely process for communicating findings after consults and encounters. Due to the nature of the platform-based electronic medical record, some notes may be required to be amended or appended. The inherent problems associated with AHLTA crossing IT platforms may cause a delay in the availability of the clinical note. If the supported MTF requires a note prior to its availability in AHLTA, the provider must send it to the supported MTF via the most expedited means possible.

17. Information Security

a. RMC and MTF TBH providers and staff will be aware of the enhanced requirements for privacy and confidentiality that is afforded to patients receiving BH care and will comply with related federal and state law as applicable.

b. As noted in OTSG/MEDCOM Policy Memo 11-005, since the Military Health System (MHS) is a covered entity as defined by the Health Insurance Portability and Accountability Act (HIPAA), telehealth programs must comply with HIPAA Transactions and Code Set Identifier, Privacy and Security Standards as they evolve per DoD 6025.18, Privacy of Individually Identifiable Health Information in DoD Health Care Programs, 19 Dec 02. HIPAA requirements dictate the standards for all electronic patient information to include those of telehealth. Guidance on HIPAA standards can be obtained from the RMC or MTF Command official representatives. MTFs must coordinate with HIPAA privacy officers to validate local protocols before clinical telehealth sessions with or involving patients begins. For all non-Active Duty patients receiving substance abuse and dependence care, 42 CFR part 2 regulations must be followed.

c. MTF Commanders will ensure that technical security measures are implemented to guard against unauthorized access to electronic Protected Health Information (PHI) that has transmitted over an electronic communications network. Patients will be informed of all personnel involved in the clinical video-teleconferencing encounter. Follow the guidelines for addressable implementation specifications:

1) Implement mechanism to encrypt data in transit, if reasonable and appropriate;

2) Implement an alternative security measure to accomplish the purposes of the standard; or

3) Implement reasonable and appropriate measure to insure the standards can still be met.

The rationale for the election of an alternative safeguard, or to not implement anything at all, must be documented with particular thoroughness.

18. Training

a. Per OTSG/MEDCOM Policy Memo 11-005, RMC and/or MTF Commanders will ensure that healthcare and supporting staff are trained, knowledgeable, and have the capacity to use telehealth as part of their clinical practice, where appropriate.

b. All TBH providers and staff will be trained on providing BH services via the use of telehealth technologies. The content of training should be set at the discretion of the RMC commander and MTF commander until such time as standardized training is developed. Such training is currently being developed as part of the CBHSOC.

c. Some preliminary guidelines for training follow:

1) Clinical and Regulatory Training. At a minimum, TBH providers will obtain local hospital orientation, HIPAA training, CHCS training, AHLTA training, and training in the use of web-based documents that vary across the AMEDD. Providers and staff have additional training needs: (i) policy and associated procedures (i.e. credentialing, privileging, licensure, medical documentation, workload accounting and coding, emergency management, and informed consent); and (ii) procedures on how to conduct a telehealth encounter (e.g. appropriate environment and camera etiquette). MTF Commanders should ensure that TBH providers and staff are trained in these issues.

2) Equipment Training. RMC Commanders or Staff should also ensure that TBH providers and staff are trained in the technical aspects of providing care via telecommunications equipment (e.g. how to operate and troubleshoot equipment). Newly assigned providers, prior to engaging in any clinical activity, must at a minimum familiarize themselves with the following aspects of the clinical video-teleconferencing equipment they will be using:

– Turning the equipment on and off.

– Connecting to another clinical video-teleconferencing system. This encompasses using the Directory or programming the Directory with a new number. Also, the provider should be familiar with the equipment controls.

– Adjusting the camera, if equipment allows, at both the near and far end of the connection. Additionally, adjusting the volume at the near end is normally done through the near end monitor control (usually a television remote).

– General functions of the clinical video-teleconferencing remote or touch-pad controls.

3) Reading this Manual, as well as OTSG / MEDCOM Policy Memo 11-005, will begin to familiarize TBH providers and staff with these issues. Therefore, reading those documents is required as a part of training efforts.

4) Training requirements specific to telehealth and TBH will be tracked by both the TBH staff at the RMC hub and the local clinic. Differences in required trainings may exist between the patient site and the provider site, and the TBH provider will have to comply with both requirements. The TBH provider will maintain a copy of the telehealth and TBH specific training in their Provider Activity File / Competency Assessment File and in their credentials file which should be maintained at each of the MTFs where services are provided.

19. Workload Accounting and Coding

a. Per OTSG/MEDCOM Policy Memo 11-005, the Unified Biostatistical Utility Office at Health Affairs approved workload accounting and coding guidance in Jul 06. Official telehealth coding guidelines can be found at: MHS Coding Guidance: Processional Services and Specialty Coding

Guidelines, Version 3.4, Unified Biostatistical Utility, 1 January 2011, Section 8.4 http://www.tricare.mil/ocfo/bea/ubu/coding_guidelines.cfm.

b. Workload credit and labor reporting associated with telehealth will be reported as follows:

1) When the patient is present, the distant provider (Skill type 1 and/or 2) who is actually providing the healthcare, will receive credit for the encounter/visit.

2) When there is a provider (Skill Type 1 or 2) physically present during the encounter both the (local and distant) provider will receive credit for the encounter (as long as documentation supports their services).

3) Workload and the man-hours of both providers are reported against the work center where the care was provided. In both scenarios, both providers must document the care in AHLTA.

c. MTF Commanders will ensure that providers code for all telehealth encounters. Currently, use of the "GT" modifier with a telehealth procedure code signifies that synchronous, real-time communication between the remote clinician occurred with the patient present and participating in the telehealth visit.

d. Staffing for the BHSOC, including TBH, is determined by the Behavioral Health Automated Staffing Assessment Model (ASAM) and Performance Based Assessment Model (PBAM). These models are based upon relative value unit (RVU) workload, GME, and established oversight functions. Therefore, it is imperative that proper documentation and coding of TBH episodes of care be completed so as to continue to generate sufficient manpower requirements to meet the needs of our patients via telehealth.

e. Per the MHS Coding Guidelines 4.1, the MHS no longer recognizes consultation codes (99241-99245 and 99251-99255). Providers will use either a new patient or established patient E/M service, depending upon the setting (inpatient or outpatient) and if the patient has previously been seen by a privileged provider of the same specialty at the same facility. Mental health, CPTs 90804–90809 and 90862 (medication management) are available for telemedicine. Note that Clinical psychologists and clinical social workers cannot code for psychotherapy services that include medical E&M services. These practitioners may not use the following CPT codes: 90805, 90807, and 90809.

20. Quality Improvement and Performance Management

a. Quality improvement for all TBH Services falls under the same guidelines as face-to-face BH encounters. Please consult AR40-68 and local guidelines for more information.

b. Peer review procedures will be established for all clinicians participating in TBH. Those procedures will be consistent with the existing procedures of the MTF to which the TBH provider is assigned. If specific procedural issues exist between this document and the local MTF, the MTF should raise those issues with the RMC Chief of TBH or BH. At a minimum, the RMC TBH Services staff will conduct peer reviews on all TBH providers regardless of physical location.

c. The United States Public Health Command (USAPHC) will conduct, on a periodic basis, programmatic evaluations in concert with performance measurement efforts for the BHSOC and other sources.

21. Patient Advocacy

a. The process for resolving providers' and patients' questions and issues that might arise as part of a TBH encounter is complicated by the fact that services span two MTFs. To resolve any issues or questions that arise as part of a TBH encounter, the patient and/or provider should contact the patient advocate at the patient site, who will be the primary advocate. Please consult patient advocacy guidelines at the patient's MTF for more information.

22. Use of TBH for Research

a. Should TBH be used in research studies/trials, all requirements for human subjects will be applied, especially when research involves the use of video or audio taping of the telemedicine conversations.

b. Attention will be paid to issues of confidentiality and informed consent in Institutional Review Board documents, ensuring that patients who are involved in research trials via telemedicine understand consent is for the purposes of research and not for receiving care via TBH. Efforts will be made to ensure that patients receiving TBH services are aware that TBH conversations will be recorded only with their consent. Please also see section on Informed Consent.

c. When the RMC TBH Services engage in research that is fully approved by the RMC's Department of Clinical Investigations (DCI) and further consented by both the MTF and the patient involved, the research protocol will articulate precise record-keeping protocols and security methods (refer to section 16 regarding Record Management). All research should comply with institutions' IRB policies.

23. Space Requirements

a. Room Requirements. Each MTF must decide to what extent it will participate in the services offered by the RMC's TBH Services. The following specifications should to be adhered to if at all possible. Modifications and allowances are permitted contingent on infrastructure if appropriate regulations permit.

1) During a TBH session, both locations should be considered a patient examination room regardless of a room's intended use.

2) Both rooms should be appropriately designed with audio and visual privacy, and the patient site should have the ability to accommodate posture and movement visualization by the provider. Rooms will be designated private for the duration of the clinical video-teleconference, and no unauthorized access will be permitted. The MTF TBH staff will take every precaution to ensure the privacy of the consult and the confidentiality of the patient. Given the variety of locations at which TBH is offered (e.g. SRP sites, MTFs), RMCs and MTFs are responsible for ensuring that their specific TBH locations are suitable for assuring patient privacy and safeguarding patient information (refer to section 17 regarding Information Security).

3) The room in which videoconferencing is used should be well lit, preferably as close to daylight as possible (i.e., fluorescent day-light or full spectrum bulbs rather than incandescent). The room should be comfortably lit for the patient and lit well enough for the provider to see the patient without shadows falling on the patient's face or other areas where

clinical data is being displayed (such as lower extremities, hands, etc.). The lighting of the provider's space should meet the same requirements in that the patient must be able to see the face of the provider with no shadowing. Daylight is often the softest and more comfortable light for the patient to view the clinician. Some directional lighting may need to be installed to illuminate the face for facial responses during the interview. If required, directional lighting should be at a 30 degree angle. Most lighting measurements are made at 36 inches above the finished floor or desktop.

4) Backdrops behind the patient and provider should be clean and plain in color and without distractions such as excessive office papers, bookshelves, etc. Blue is an optimum color for backdrops as blue neither reflects nor absorbs light, is a calming color, and helps to accentuate the area of interest. If there are bookshelves or other office furniture, then a test connection should be made to ensure there is no camera distortion as some cameras may focus on office items and distort the provider.

5) Gaze angle is the angle between the near participant's camera and where the near participant looks at the onscreen far participant (eye contact). The vertical location of the far participant on the screen will affect gaze angle. Gaze angles of approximately 5 to 7 degrees are imperceptible to most persons. Gaze angles should be as small as practical.

6) The privacy of the patient and confidentiality of the session (e.g. sound-proof room, sign on door, etc.) must be addressed for each space used for TBH encounters. These accommodations will conform to the same standards as the MTF provides for traditional patient encounters.

7) If the MTF intends to engage the clinical video-teleconferencing equipment in group therapy or psycho-education, the MTF should select a room that will accommodate the equipment and approximately 8 to 10 patients.

8) If a physical examination is required, the room should be large enough to accommodate an exam table and to allow the patient to demonstrate mobility activities.

9) When children are assessed, the room at the patient site should be large enough to include the youth and a parent, and one to two other individuals and to allow the camera to scan an area large enough to adequately observe children's motor skills as they move about the room, play, and separate from their parents.

b. Ancillary Equipment. The following specifications for ancillary equipment should be adhered to if at all possible. Modifications and allowances are permitted contingent on infrastructure.

1) Furniture requirements are based on the type of care the MTF will employ. Group therapy requires more chairs than individual therapy. The most ideal setting would be one in which a table could be incorporated for things such as child encounters (where the provider could observe the patient drawing) or small classes (e.g. staff CME or patient education). For physical exams, an examination table is best (e.g. a physician's assistant performs a physical exam with a patient while a provider directs/monitors on clinical video-conferencing equipment). Each RMC TBH service may have specific equipment that is required to maximize the clinical interventions.

2) The comfort of the TBH professional undertaking the consultations should be considered to prevent fatigue and computer vision syndrome problems common with increased computer

interactions. Chairs should minimize excessive movements as a blurring of the provider may occur.

3) When children are assessed, a table should be available to provide a surface for the child to draw or play while the parent relates the history, but the table should not interfere with communication or viewing the youth's motor skills. Some simple toys should be provided both to occupy the child and to allow assessment of skills and should be selected based on age-appropriateness and child safety standards.

c. Administrative Issues. The following specifications for administrative issues in the provision of TBH should to be adhered to if at all possible. Please see section on TBH Technical Requirements for details on these issues.

1) RMC and MTF TBH staff, along with local IT support staff or United States Army Medical Information Technology Center (USAMITC) as appropriate, will ensure the technical readiness of the telehealth equipment and the clinical environment.

2) RMCs and MTFs providing TBH should have policies and procedures in place to ensure the physical security of telehealth equipment.

3) RMCs and MTFs providing TBH will ensure compliance with relevant safety laws, regulations, and codes for technology and technical safety.

4) RMCs and MTFs providing TBH should have infection control policies and procedures in place for the use of telehealth equipment and patient peripherals that comply with organizational, legal, and regulatory requirements to include but not be limited to specific infection control guidelines for toys handled by patients/children.

24. Technological Requirements

a. Clinical Video-Teleconferencing Equipment. There are a variety of clinical video-teleconferencing systems (e.g. Tandberg/CISCO, Polycom, LifeSize) currently in use with the RMC TBH Services. Additional systems purchased should be compatible with the current infrastructure specifications. Maintenance agreements are required for all hardware connected to a DoD or Army Local Area Network (LAN). Clinical video-teleconferencing implementation should ensure USAMITC involvement. Computers used for clinical video-teleconferencing will comply with all facility, state, federal, and Army regulations, as appropriate. Equipment used in TBH complies with International Telecommunications Union (ITU) standards (H**,** G, and T series standards), allowing interoperability.

1) The ATA recommends that high quality microphones and speakers should be used in TBH consultations to ensure accurate interpretation of the patient's and provider's spoken communication. The ATA also recommends that TBH users, where available, practical, and affordable should be able to, when cost-effective:

- Display static pictures, diagrams, or objects.
- View and share a computer desktop or applications.
- Play videos or CDs so people at other locations can see and hear them.
- Record meetings when clinically appropriate and with patient permission.
- Share information on a common white board or via computer files.

b. Levels of VTC Equipment. In general, there are three levels of equipment used in the practice of TBH:

1) Desktop office use. Desktop office use is typified by the use of portable VTC equipment, such as the Tandberg/CISCO MOVI, connected to a Government Furnished Equipment computer with CAC access and an available Universal Serial Bus (USB) port. The following generic use-cases apply to the desktop office use equipment level:

- Provider to provider - administrative consultation.
- Provider to provider - clinical consultation.
- Provider to patient - with local clinical support capability at patient end.

2) Clinician office use. Clinician office use is demonstrated by provider to patient consultation where a more sophisticated level of VTC equipment, maybe justified, than is offered by typical portable VTC equipment. The requirement for clinician office use of VTC equipment in the practice of TBH should be justified by exception, on case-by-case basis, by the end user and supporting MTF.

3) Conference room/large audience use. Conference room/large audience use is characterized by administrative use, staff coordination/education, group therapy, and patient outreach/education. VTC equipment used in conference room/large audience use is normally associated with existing multi-use facility video tele-conferencing equipment with the ability to pan, tilt, and zoom.

c. IP-Based VTC. Connecting over this medium provides for high bandwidth usage. End-users should use a conservative approach, near industry standards for the video call (preferred bandwidth of 384 kbps), to allow for the smooth and natural communication pace necessary for clinical encounters. The use of lower bandwidths is necessary in some locations due to lack of or expense of broadband access and the need to provide services to disparate and/or remote locations. Devices connected onto this system should be fully documented, under a maintenance agreement and certified with USAMITC (if the system is used in multi-point calls).

d. ISDN Circuits. ISDN circuits are requested through supporting MTF Information Management Division. This also applies to remote sites supported by the same MTF.

e. Security. RMCs and MTFs providing TBH will implement policies, procedures, and technical security measures to guard against unauthorized access to electronic PHI (EPHI) transmitted over an electronic communications network. Information security must involve all the ways that people handle and access EPHI. The responsibility to secure EPHI extends to all members of an organization's workforce regardless of work location.

f. Service and Property Accountability. RMCs and MTFs providing TBH will have processes in place to ensure the safety and effectiveness of equipment through ongoing support and maintenance. When purchased, the TBH Service clinical video-teleconferencing system should usually include a three-year service contract. Usually the supported MTF will be responsible for extending the maintenance contract unless USAMITC assumed responsibility for the purchase, maintenance, and life cycle refresh of specific clinical video-teleconferencing equipment. Generally, if the TBH Service purchases a clinical video-teleconferencing system for a supported MTF, the system will be transferred to the MTF Property Book, and the MTF will maintain that system beyond the initial service contract.

g. Setup. The RMC TBH Service, RMC IT staff, and/or USAMITC will assist MTFs with the initial setup of their clinical video-teleconferencing equipment. This includes site visits and/or telephone consultations.

h. Troubleshooting. The local IT support or facilitation staff who helped install the systems are the primary responder. The RMC TBH Service may provide backup technical support to all MTFs as needed. USAMITC call center can be called at any time in the troubleshooting process and will provide support if the MTF technical staff or the RMC IT personnel are not available or need assistance. The USAMITC technical support staff will either resolve the problem or coordinate with on-site MTF support personnel to have the hardware RMA for replacement. To call USAMITC for assistance dial 1-800-USAMITC, Opt 2.

i. Redundancy. Where possible, MEDCOM MTFs have redundant critical power and network connectivity for critical communications both within the MTF and throughout the Wide Area Network. All MTFs are required to have a Continuity of Operations (COOP) plan for disaster recovery of major network outages. COOP plans must be tested a minimum of once per year to assure the accuracy and workability of the recovery plan. A small uninterruptable power supply for the video conferencing system and network can also provide some redundancy.

j. Ancillary Technical Equipment. Certain ancillary technical equipment is required.

1) The MTF must have an office telephone in the clinical video-teleconferencing room. The phone facilitates communication with the provider and staff if technical difficulties arise. It also allows the provider to resolve common problems by phone while he/she or the patient manipulates the clinical video-teleconferencing equipment. Additionally it also provides a backup communication system in case of an emergency.

2) Providers must have access to a computer that is linked to the electronic medical record. It is preferable that the provider has a minimum of two computer screens so as to view necessary medical information and be able to access other sources of information and computer applications necessary to conduct the session. However, if the provider is using a stand-alone clinical video-teleconferencing system, one computer screen may suffice.

3) For group therapy, the camera should have a zoom capability that can easily allow group observation. For physical exams, an examination table is best. Subspecialty telehealth services may have specific equipment that is required to maximize the clinical interventions.

25. Virtual Behavioral Health

a. Virtual Behavioral Health (VBH) establishes the capability to provide BH services at a distance at SRP and reverse SRP sites and MTFs in accordance with the BHSOC. VBH was established in September 2009 to maximize behavioral health provider assets and modern communications technology to provide uniform contact with redeploying Soldiers. The goal is to identify care requirements early and help promote a cultural change within the force to transform a Soldier's view of behavioral health as that of another beneficial tool for a Warrior to use for his or her readiness.

b. The conduct of VBH should provide a positive experience for Soldiers, so that they are more likely to seek BH assistance in the future if needed. VBH enables local leaders to employ surge BH resources from other installations within their RMC or from other RMCs and potentially

reduces stigma. Additionally, some Soldiers prefer this method, and it may decrease barriers to care.

c. In accordance with DA EXORD 277-10 BHSOC, 10 Aug 10, VBH will be available for Soldiers at all SRP sites. VBH will be used as an option at Touch Points #3 (Reintegration PDHA) and #4 (Reintegration PDHRA) and may be used as an option at Touch Point #5 (Periodic Health Assessment Screening). VBH will comply with all requirements related to those Touch Points as stated in FRAGO 7 to MEDCOM OPORD 10-70.

d. At Touch Point #3, Soldiers who are determined by the screening primary care provider to require a non-urgent referral to BH can be evaluated by a BH professional at the MTF, either through a face-to-face consult or through VBH. Soldiers who are determined by the screening primary care provider to require an urgent (immediate, <24 hour) referral to BH will be evaluated by an on-site BH professional, either through a face-to-face consult or through VBH. In both cases, the BH provider will be provided copies of any relevant forms, either in-person or electronically, related to the positive findings and concerns of the screening primary care provider. Further support or medical referral will be determined by the BH provider at the conclusion of the consult. Due to the need to expedite processing reserve component Soldiers through the SRP/demob site so they can return to home station, reserve component Soldiers will have priority over active duty within similar medical risk categories for urgent referrals.

e. At Touch Point #4, in cases where the PDHRA process is conducted in an SRP site, Soldiers who are determined by the screening primary care provider to require an urgent (immediate, <24 hour) referral to BH will be evaluated by an on-site BH professional, either through a face-to-face consult or through VBH. All other PDHRA BH-referrals will be handled through the supporting MTF or other relevant clinics to be performed either in-person or through VBH. Emergent care requirements will be addressed following existing policy and local SOP.

f. At Touch Point #5, Soldiers who are determined by the screening primary care provider to require a non-urgent referral to BH can be evaluated by a BH professional at the MTF, either through a face-to-face consult or through VBH. Soldiers who are determined by the screening primary care provider to require an urgent (immediate, <24 hour) referral to BH will be evaluated through the supporting MTF or other relevant clinics to be performed either in-person or through VBH. Emergent care requirements will be addressed following existing policy and local SOP.

g. Each installation preparing for post-deployment screening, reintegration post-deployment health reassessment screening, and annual screening will assess how many Behavioral Health providers are needed for routine care at the installation during the screening period and how many Behavioral Health providers are needed to provide evaluations for Soldier referrals resulting from screening. The MTF will then assure adequate professional resources for the SRP by assigning available intrinsic Behavioral Health assets to the mission and by coordinating with the RMC for available surge Behavioral Health providers (in-person) and for available virtual Behavioral Health resources in order to match anticipated requirements. Each site will make available the necessary number of BH Providers virtually so that all Soldiers have access to VBH if they so choose.

h. VBH assessments can be conducted by providers on Contract Service Agreements. Providers from the Veterans Administration (VA) with appropriate training in relevant Army policies and VBH modalities may be used as well. Organic providers that are assigned to the installation where the screening is occurring should not be used for virtual screening to prevent BH access to

care at the local MTF from being negatively affected during screening. Intra-regional assets may be used; inter-regional assets may also be used to assist during surge periods.

i. Specific training requirements for providers and other staff involved in VBH (above and beyond those requirements outlined in FRAGO 7 to OPORD 10-70) will be determined by ATO, BHD, the BHSOC TBH Working Group, and the BHSOC Education and Training Working Group. This training requirement will become standardized across the AMEDD once selected and developed and will supplement training requirements outlined in FRAGO 7 of OPORD 10-70. Until then, the content of any additional training should be set at the discretion of the SRP site.

j. All RMCs will ensure that MTFs employ emergency management protocols for VBH. Qualified designated providers, Special Forces Medical Sergeants, Independent Duty Medical Technicians, and/or Independent Health Services Technicians will be available in the immediate area of the VBH encounter rooms to institute emergency management protocols if necessary.

k. Based on local discretion, SRP sites will incorporate follow-up methods with additional face-to-face providers and/or virtual appointment slots, or make arrangements for Soldiers to receive these appointments from/at other federal installations.

l. Provider and patient sites will provide adequate VBH stations enabling interactive audio-visual communications to ensure a smooth process for Soldiers. VBH stations will be fully functioning and ready for Soldiers at all times. There will not be less than 4 stations at each of the provider and patient sites so that all Soldiers have access to VBH if they so choose. For reserve component Soldiers with a short processing period or for active duty component Soldiers that process rapidly, more VBH stations may be required and are recommended to accommodate throughput. All stations may be equipped with equipment certified for provider-to-patient encounters.

m. All encounters will be HIPAA-compliant. All sites will coordinate with a HIPAA Officer to validate local protocols before VBH begins.

n. The content and outcomes of the patient encounter will be documented in the electronic medical record and archived within AHLTA.

o. Soldiers seen via VBH should be registered at the provider site, so that the provider site can receive workload credit. Methods for documenting and capturing the provider's workload for VBH will be managed by the provider's facility in coordination with the patient site.

p. All tele-providers will be privileged at the provider and patient sites and will obtain all the required network access credentials in advance of VBH.

q. Informed consent will be obtained for all VBH encounters and scanned into the electronic medical record. Any refusals to sign consent forms will be managed in accordance with local policy and procedure.

r. VBH and face-to-face providers may be utilized on a first available basis. Soldiers may always "opt out" of either modality based on their preference when the next available option opens, either VBH or face-to-face. By employing this methodology, the option of offering VBH to all Soldiers is preserved, and each Soldier's preference is maintained.

s. Until such time as a centralized telehealth scheduling solution is implemented, scheduling of virtual providers will be set based on local discretion.

t. Responsibilities.

1) RMC commanders and RMC telehealth leads will coordinate all VBH activities with the AMEDD Telehealth Office and BHD.

2) RMC commanders will support VBH and direct their subordinate commanders to engage and actively support the initiatives at their respective MTFs.

3) RMC commanders will coordinate with Installation Management Command (IMCOM) to obtain appropriate facilities and bandwidth for VBH.

4) RMC commanders will request external VBH provider support to OTSG Health Care Operations.

5) The AMEDD Telehealth Office, BHD, the BHSOC TBH Working Group, and the BHSOC Education and Training Working Group will determine any additional training requirements for providers and other staff involved in VBH.

6) The ACoS for HP&S, BHD in coordination with the AMEDD Telehealth Office is responsible for general policy oversight for VBH and advises the Commander.

ANNEX 2 – MTF ANNEX

Staff at participating MTFs will insert MTF-specific SOP here. This SOP will include at a minimum the following topics:

a. Services offered
   - Specific TBH services offered at the MTF.
   - TBH services listed by MTF providing and receiving the services (e.g. Walter Reed to Ft. Bragg: tele-psychiatry, Ft. Drum to Ft. Bragg: tele-psychology).

b. Requirements
   - Clearly described roles and responsibilities of the MTF staff described in relation to RMC and tele-provider roles and responsibilities.
   - Any MTF-specific documents required on a routine appointment basis that were not included in the "Support from MTFs" section in the MEDCOM TBH Manual or the RMC Annex.
   - Procedures for obtaining and sharing consents for BH treatment and services in support of patient encounters conducted via TBH, as well as procedures for refusals to sign consent forms.
   - Description of roles, responsibilities (e.g. daytime and after hours coverage), communication, and procedures around emergency issues at the MTF. The description will establish the need for a designated licensed provider with published contact information that is available at the site where the service member is located. All MTF SOPs will provide such a description for a situation in which a patient decompensates during a routine TBH appointment (and the situation therefore becomes an emergency). If the MTF offers emergency TBH services (i.e. a patient presents as an emergency), then the MTF SOP will also provide written protocols to support emergency TBH services.
   - MTF protocol(s) for psychiatric admissions to either civilian or military facilities, including an explanation of how it pertains to TBH.
   - Local civil commitment regulations.
   - Clearly defined role, responsibilities, and procedures around patient safety issues related to continuity of care (e.g. procedures a tele-provider should follow if they determine that a patient requires a face-to-face encounter or other in-person attention at the patient site for safety reasons).
   - Decision on whether the Commander of the MTF receiving services agrees to allow trainees to provide TBH services.
   - MTF-specific VBH protocols supporting those in this MEDCOM manual, if any.

c. Limitations
   - Any MTF-specific limitations on the use of TBH.
   - Any MTF-specific limitations on the availability or non-availability of emergency TBH services (i.e. patient presents as an emergency, as opposed to a patient decompensating during a routine TBH appointment and the situation becomes an emergency).

d. Additional regulation
   - Any applicable MTF-specific regulation not covered above.

Appendix B: ATA Practice Guidelines for Video Based Online Mental Health (3)

AMERICAN TELEMEDICINE ASSOCIATION

PRACTICE GUIDELINES FOR VIDEOCONFERENCING-BASED TELEMENTAL HEALTH



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Practice Guidelines for Video-Based Online Mental Health Services

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Preamble

The American Telemedicine Association (ATA), with members from throughout the United States and throughout the world, is the principal organization bringing together telemedicine practitioners, healthcare institutions, vendors and others involved in providing remote healthcare using telecommunications. ATA is a nonprofit organization that seeks to bring together diverse groups from traditional medicine, academia, technology and telecommunications companies, e-health, allied professional and nursing associations, medical societies, government and others to overcome barriers to the advancement of telemedicine through the professional, ethical and equitable improvement in health care delivery.

ATA has embarked on an effort to establish practice guidelines and technical standards for telemedicine to help advance the science and to assure the uniform quality of service to patients. They are developed by panels that include experts from the field and other strategic stakeholders and designed to serve as both an operational reference and an educational tool to aid in providing appropriate care for patients. The guidelines and standards generated by ATA will undergo a thorough consensus and rigorous review, with final approval by the ATA Board of Directors. Existing products will be reviewed and updated periodically.

The practice of medicine is an integration of both the science and art of preventing, diagnosing, and treating diseases. Accordingly, it should be recognized that compliance with these guidelines will not guarantee accurate diagnoses or successful outcomes. The purpose of these standards is to assist practitioners in pursuing a sound course of action to provide effective and safe medical care that is founded on current information, available resources, and patient needs. The practice guidelines and technical standards recognize that safe and effective practices require specific training, skills, and techniques, as described in each document. The resulting products are properties of ATA and any reproduction or modification of the published practice guideline and technical standards must receive prior approval by ATA.

If circumstances warrant, a practitioner may responsibly pursue a course of action different from the guidelines when, in the reasonable judgment of the practitioner, such action is indicated by the condition of the patient, restrictions or limits on available resources, or advances in information or technology subsequent to publication of the guidelines. Nonetheless, a practitioner who uses an approach that is significantly different from these guidelines is strongly advised to provide documentation, in the patient record, that is adequate to explain the approach pursued.

This guidelines document focuses on interactive video-conferencing based mental health services and telemental health/telehealth. The document is a companion document to ATA's Evidence-Based Practice for Telemental Health, an educational tool to aid practitioners in meeting these practice guidelines.

Scope

These guidelines are designed to serve as both a consensus operational best practice reference based on clinical empirical experience and an educational tool to aid practitioners in providing appropriate telehealth care for patients. The term telehealth indicates an inclusion of all health professionals, ranging from medicine to mental health, to educators, and to nurses. The use of telehealth also refers to the broader scope of e-health and distance education. Telemental health therefore, is the practice of mental health specialties at a distance. The practice of medicine is an integration of both the science and art of preventing, diagnosing, and treating diseases. It should be recognized that adherence to these guidelines will not guarantee accurate diagnoses or successful outcomes. The purpose of these guidelines is to assist practitioners in pursuing a sound course of action to provide effective and safe medical care that is founded on current information, available resources, and patient needs. The guidelines are not meant to be unbending requirements of practice and they are not designed to, nor should they be used, to establish a legal standard of care. The American Telemedicine Association advises against the use of these guidelines in litigation in which the clinical decisions of a practitioner are called into question.

The primary care or managing practitioner is responsible for the decision about the appropriateness of a specific procedure or course of action, considering all presenting circumstances. An approach that differs from the ATA guidelines does not necessarily imply that the approach varied from the standard of care. If circumstances warrant, a practitioner may responsibly pursue a course of action different from these guidelines when, in the reasonable judgment of the practitioner, such action is indicated by the condition of the patient, restrictions or limits on available resources, or advances in information or technology subsequent to publication of the guidelines. Nonetheless, a practitioner who uses an approach that is significantly different from these guidelines is advised to document in the patient record information to explain the approach pursued.

Introduction

Telemental health is one of the most active applications of telehealth rendered in the United States. Mental health is particularly suited to the use of advanced communication technologies and the internet for delivery of care. By using advanced communication technologies, mental health professionals are able to widen their reach to patients in a cost-effective manner, ameliorating the maldistribution of specialty care. The following Guidelines are designed to aid

in the development and practice of coherent, effective, safe and sustainable telemental health practices. Establishing guidelines for telemental health improves clinical outcomes and promotes informed and reasonable patient expectations. When guidelines, position statements, or standards from a professional organization or society such as (but not limited to) the American Psychiatric Association[1], American Psychological Association[2] or National Association of Social Workers[3] exist, it is advised that mental health professionals review these documents and incorporate them into practice.

Telemental health, like telemedicine, is an intentionally broad term referring to the provision of mental health and substance abuse services from a distance. This guideline focuses on two-way, interactive videoconferencing as the modality by which telemental health services are provided. In the future, additional sections will be added to address the use of the internet and other asynchronous or social relationship environments for interactions between mental health professionals and their patients and families. The use of other modern technologies such as virtual reality, electronic mail, remote monitoring devices (home telehealth store and forward technology), chat rooms, and web-based clients are not included in this version of the telemental health guidelines.

The ATA provides the core standards for telemedicine operations and provides overarching guidance for administrative, clinical, and technical standards (http://www.americantelemed.org/i4a/pages/index.cfm?pageid=3311). The Practice Guidelines for Videoconferencing-Based Telemental Health covers all areas, reflecting the basic component processes associated with most telemental health consultations. The telemental health guidelines give further detail to these core standards in relation to the specialty area. This section of the guideline contains requirements, recommendations, or actions that are identified by text containing the keywords “shall,” “should,” or “may.” “Shall” indicates that it is required whenever feasible and practical under local conditions. “Should” indicates an optimal recommended action that is particularly suitable, without mentioning or excluding others. “May” indicates additional points that may be considered to further optimize the telemental health care process.

A glossary of terms, references to literature, and informative web sites are included at the end of the document.

Application for the Practice of Telemedicine

a. Clinical Applications

Currently, the point of delivery for telemental health services is as varied as the type of services that are being provided. Sites include hospitals, emergency rooms, community mental health centers, clinics, physician offices, nursing homes, assisted living facilities, prisons, schools, and patient homes. With careful planning, telemental health services can significantly impact the quality, timeliness, and availability of services in almost any mental health care delivery system.[4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18]

Scope of Services

Clinical applications of telemedicine encompass diagnostic, therapeutic, and forensic modalities across the lifespan. Common applications include pre-hospitalization assessment and post-hospital follow-up care, scheduled and urgent outpatient visits, medication management, psychotherapy and consultation.

Clinical Interviews

Telemental health interviews may be conducted between physicians in consultation, between a physician and another health care provider (e.g., a case manager, clinical nurse practitioner or physician assistant), or between mental health professionals and a patient. Other persons, such as another health care provider or family member, may also be present in a patient interview. The Telemental health interview may be an adjunct to periodic face-to-face contact or may be the only contact; and is typically supported by additional communications technologies such as faxed or emailed consultation information or transmission of an electronic medical record.

Emergency Evaluations

Many programs across the United States provide emergency evaluations by telemedicine successfully with minimal support staff and standards in place at the patient site. Emergency evaluations for psychiatric hospitalization can be conducted via telemedicine, and usually will require additional personnel to provide physical control of the environment and possibly the patient, for patient safety. Situations such as a patient who is suicidal, homicidal, or suffering from dementia or acute psychosis may require additional personnel in the room in addition to family members. In general, adequate support staff or responsible family members shall be present at the remote site in order to safely care for the patient. If other alternatives are immediately available to meet the patient's needs without transfer, services are preferred to be provided on-site and in-person. In the event that support staff and family members are not present, the telemental health provider **must** make a determination whether immediate

intervention is deemed necessary for patient safety. [19, 20, 21, 22] Special attention shall be paid to the enhanced need for privacy and confidentiality and every attempt to preserve the patient's right to privacy shall be employed.

Case Management

In large distributed systems where multi-provider case management is needed, videoconferencing allows collaboration between all the involved clinical participants regardless of distance. Clinical treatment plans can be developed with input from experts who would not otherwise be available.[23, 24, 25, 26]

Clinical Supervision

Supervision of trainees (residents or interns) at a distant site can facilitate both training and patient care. Supervision may be done either in real-time with the supervisor present via videoconferencing, or, when appropriate, by the use of store and forward technology.[27] Supervising practitioners shall comply with state and federal requirements for in-person supervision for residents and other practitioners whose positions are federally or state funded.

b. Non-Clinical Applications of Videoconferencing

Distance Learning

Videoconferencing technologies for education encompass a broad range of applications. These include, but are not limited to, point-to-point applications, such as physician-to-physician, physician-to-patient, or multipoint sessions such as a classroom setting where a teacher is at one site and the "pupils" are at other multiple remote sites. Distance learning modalities can be used for off-site mentoring to teach new techniques, or multi-site transmission of "grand rounds" conferences and continuing medical education (CME) events. These can be streamed via the internet or transmitted a number of ways including point-to-point circuits and the public Internet (if transmitting protected health information or other sensitive information via the public internet, AES encryption or a virtual private network (VPN) ***shall*** be used to secure the transmission).[28, 29] Distance education modalities can also be used for clinical care of patients, e.g. patient teaching regarding medications, therapies, or compliance with treatment plans.

Research

Telemedicine has been applied as an effective and reliable means of gathering research data from clinical populations. Telemental health enables multi-site and remote acquisition of information via in-person interviews or direct observation, as well as providing a simple means of archiving patient-provider interactions in video format for later scoring and evaluation. All requirements for human subjects research ***shall*** be applied to the use of telemental health for

research purposes, especially when research involves the use of video or audio taping of the telemedicine conversations. Attention ***shall*** be paid to issues of confidentiality and informed consent, ensuring that patients who are involved in research trials via telemedicine understand consent is for the purposes of research and not for receiving care via telemental health. Efforts ***shall*** be made to ensure that patients receiving telemental health services are aware that telemedicine conversations will be recorded only with their consent.[30]

Administration

Interactive two-way audio-visual communication between distant hospitals, clinics, schools, and justice centers is an effective means of providing administrative services and support and helps organizations to achieve cost savings in large or geographically dispersed systems. Any discussion of protected health information ***shall*** be secured through use of a private, point-to-point circuit, an ISDN connection, or AES encryption or a virtual private network (VPN) ***shall*** be used for transmissions via the public internet.

Guidelines for the Practice of Telemental Health

Any organization or provider considering the use of telecommunications equipment for the purpose of providing mental health or substance abuse care to a remote site ***shall*** have in place prior to initiating such a service a set of Standard Operating Procedures or Protocols that ***shall*** include (but are not limited to) the following administrative, clinical and technical specifications.

The guidelines ***shall*** specifically describe roles, responsibilities (i.e., daytime and after-hours coverage), communication, and procedures around emergency issues. The degree of involvement of the telemental health provider will vary greatly between remote sites and be determined by legal issues, local resources, and staffing available to the clinic.[31]

a. Standard Operating Procedures/Protocols

Telemental health organizations and providers ***shall*** ensure that appropriate staff is available to meet patient and provider needs before, during, and after telemental health encounters of all types. Organizations and practitioners ***shall*** have agreements in place to assure licensing, credentialing, training, and authentication of patients and practitioners as appropriate and according to local, state, and national requirements.

Telemental health organizations and practitioners ***shall b***e aware of the enhanced requirements for privacy and confidentiality that is afforded to patients receiving mental health care. In the United States, additional state regulations for privacy, confidentiality and patient rights apply above and beyond requirements in place for general health care interactions.

Telemental health organizations and practitioners ***shall*** have billing and coding processes in place that share information across systems for the purposes of payment that do not risk exposure of mental health patients' personal health information.

Telemental health organizations and practitioners ***shall*** determine processes for documentation, storage, and retrieval of telemental health records. Specific descriptions ***shall*** be in place that address who can have access to the records. Most organizations institute a higher level of security on mental health patients' records than on other patients' records.

Patients receiving mental health and substance abuse services are afforded a higher degree of patients' rights as well as organizational responsibilities. Telemental health organizations ***shall*** be aware of these additional responsibilities and ensure that they are achieved.
Telemental health organizations and practitioners ***shall*** have in place policies and procedures that address all aspects of administrative, clinical, and technical components regarding the provision of telemental health and ***shall*** keep the policies and procedures updated on an annual basis or more often as needed.

Telemental health organizations and practitioners ***shall*** have in place a systematic quality improvement and performance management process that complies with any organizational, regulatory, or accrediting, requirements for outcomes management. The quality improvement indicators ***shall*** address the critical components of providing telemental health services and ***shall*** be used to make programmatic and clinical changes.

Telemental health organizations and practitioners ***shall*** comply with the specific consents to treat and for medication administration that apply to the area of mental health. Although no special consents are needed to use telemental health to serve patients, additional layers of consent are required during the course of treatment of persons with mental health conditions. Procedures ***shall*** be in place between organizations and telemental health practitioners for the purposes of obtaining and sharing consents for mental health treatment and services.

Telemental health professionals ***shall*** be aware of who has regulatory authority and any and all requirements (including those for liability insurance) that apply when practicing telehealth in another jurisdiction (eg. Across state lines), with particular attention to the additional responsibility that might apply in mental health encounters.

b. Clinical Specifications

- The telemedicine operation and its health professionals ***shall*** ensure that the standard of care delivered via telemedicine is equivalent to any other type of care that can be delivered to the patient/client, considering the specific context, location and timing, and relative availability of in-person care.

- Health professionals ***shall*** be responsible for maintaining professional discipline and clinical practice guidelines in the delivery of care in the telemedicine setting, recognizing that certain modifications may need to be made to accommodate specific circumstances.

- Any modifications to specialty specific clinical practice standards for the telemedicine setting ***shall*** ensure that clinical requirements specific to the discipline are maintained.

- Health professionals providing telemedicine services ***shall*** have the necessary education, training/orientation, and continuing education/professional development to insure they possess the necessary competencies for the provision of quality health services.

1. General Telemental Health Practice Issues

- ***Exam Inclusion Criteria/Scope*****:** The inclusion of cases for a telemental health consult is at the discretion of the referring and consulting clinicians. There are no absolute contraindications to patients being assessed using telemental health.[32]

- ***Consult Request Data:*** Information ***shall*** be available to the consulting practitioner that meets legal and regulatory requirements for referral and that provides supportive and data to the practitioner in preparation for evaluating the Telemental health patient, and for on-going patient management. Procedures ***shall*** be in place between organizations and practitioners for sharing patient mental health information.

- ***Cultural Competency:*** The clinician practicing telemental health ***should*** have cultural competency in the population he or she is serving at a distance.[33, 34] Cultural influences may be different between the patient and the practitioner sites and means of assessing the difference and notifying the practitioner shall be in place.

- ***Cognitive Testing:*** Cognitive testing may be provided via telemedicine but ***may*** need to be modified for use via video. Organizations administrating cognitive testing via videoconferencing ***shall*** be aware of the properties of the individual test instrument, how it may be impacted by videoconferencing, and potential needed modifications. Computer-based testing ***may*** be provided at the patient location and results securely transmitted to the telemental health practitioner for scoring and interpretation. On-site testers are appropriate to be used for cognitive testing and telemental health organizations ***shall*** have in place arrangements for the use of ancillary staff to administer cognitive testing and the sharing of results with the telemental health provider.[24,35,36,37,38,39,40]

- ***Videoteleconferencing (VTC):*** The following guidelines are recommended to ensure the safety of patients and also accurate diagnosis, appropriate intervention, and supportive ongoing care.

  All persons in the exam room at both sites ***shall*** be identified to all participants prior to the consultation room. Disclosing persons who are attending the consultation ***shall*** be done by panning each end of the consultation with the video camera or at a minimum, announcing the presence of individuals present and asking the patient's permission for additional persons to be in the room. Permission from the patient is not required if safety concerns mandate the presence of another individual or if the patient is being legally detained, but should be encouraged by the practitioner.

  Clinical History/Results**:** The sharing of clinical history and results ***shall*** comply with established legal and regulatory requirements. Telemental health organizations and practitioners shall have agreements in place that outline the procedure for securely sharing such clinical history and results. Laboratory or procedure results ***should*** be reviewed by the telemental health consultant via remote health record access or facsimile. Telemental health consultants need to have access to relevant clinical data as if the patient were being seen in person. Electronic prescribing ***should*** be used where available.[40, 41, 42, 43]

  Reports**:** As with any consultation, there ***shall*** be a traceable record of the teleconsultation at both the referring and consulting sites. The practitioner at a minimum shall have documentation including pertinent and required aspects of the clinical encounter, and the patient site shall have documentation that a telemental health visit occurred with the patient. The consultant's opinion and any services that were ordered or performed ***shall*** also be documented in the patient's medical record and communicated by written report to the requesting physician or other appropriate source (e.g., physician assistant, nurse practitioner, doctor of chiropractics, physical therapist, occupational therapist, speech-language therapist, psychologist, social worker, lawyer, insurance company) as required by professional conduct, legal, or regulatory requirements. Recommended language for the consultant includes "Based on the video images and history provided, my impression is as follows." Verbal communication with referring practitioners, or other pertinent entities may be given and written records of the interaction ***shall*** be kept according to legal and regulatory requirements at least at one site (referring and/or consulting). Reports may be faxed, mailed or electronically sent after the interaction has ended and ***should*** be done using secure methods. A consultant report ***shall*** include at a minimum the diagnosis and/or differential diagnoses, a summary of the findings, and recommended management.

  Psychotherapy: Standard practice guidelines for therapy ***shall*** direct psychotherapy services within the telemedicine setting. Evidence-based practice and empirically supported treatments ***shall*** be followed and adapted by the telemental health

practitioner as appropriate for videoconferencing. Persons engaged in providing psychotherapy services ***shall*** be aware of their professional organizations positions on telemental health and incorporate the professional association standards whenever possible.

Medication Management: Expert pharmacotherapy is the most frequently requested telemental health service[44, 45] and various methods have been employed, including: a) the telepsychiatrist consults to the referring primary care or managing physician (PCP) who prescribes the medications; b) the telepsychiatrist works with a mid-level professional at the patient site who writes the prescriptions; and c) the telepsychiatrist directly prescribes. In this last scenario, clear procedures ***shall*** be established and communicated to all parties regarding the method for obtaining initial prescriptions and refills and reporting adverse effects. Pharmacotherapy ***shall*** comply with the APA and AACAP[46] practice parameters.

2. Psychiatric Emergencies

Psychiatric emergencies can be experienced in a telehealth visit similar to an in-person visit. Provisions for routine or emergent local medical management ***shall*** be included in any local operating procedure or protocol. The following specific recommendations were adapted from a previous set of published clinical guidelines on emergency telepsychiatry.[47]

a. ***Administrative Issues:*** A patient site assessment ***shall*** be undertaken that includes obtaining information on local regulations and emergency resources, identification of potential local collaborators to help with emergency management. Emergency protocols ***shall*** be created for all telepsychiatry clinics with clear explanation of roles and responsibilities in emergency situations, determination of outside clinic hours emergency coverage, and guidelines for determining at what point other staff and resources should be brought in to help manage emergency situations.

b. ***Legal Issues:*** Clinicians ***shall*** be familiar with local civil commitment regulations and have arrangements where possible to work with local staff to initiate/assist with civil commitments.

c. ***General Clinical Issues:*** Clinicians ***shall*** *b*e aware of the impact of telepsychiatry on provider's perception of control over the clinical interaction, and how this might impact provider's management. Clinicians ***shall*** *b*e aware of safety issues with patients displaying strong affective or behavioral states upon conclusion of a session, and how patients may then interact with remote site staff.

3. Special Groups

a. Children: Children generally respond very positively to videoconferencing consultations.[48] VTC procedures for the evaluation and treatment of youth ***shall*** follow the same guidelines presented for adult with modifications to consider the developmental status of youth, such as motor functioning, speech and language capabilities, and relatedness. When legally required, families ***shall*** be informed when a telehealth appointment is scheduled for their child, in order to prepare their child for a VTC appointment.

a. The room at the originating site (patient site) ***should*** be large enough to include the youth and a parent, and one to two other individuals and to allow the camera to scan an area large enough to adequately observe children's motor skills as they move about the room, play, and separate from their parents.[49, 50]

b. A table ***should*** be available to provide a surface for the child to draw or play while the parent relates the history, but the table ***should*** not interfere with communication or viewing the youth's motor skills. Some simple toys ***should*** be provided both to occupy the child and to allow assessment of skills and ***should*** be selected based on age-appropriateness and child safety standards.

c. The care and the clinical procedures used with children ***should*** follow the practice parameters developed by the American Academy of Child and Adolescent Psychiatry.

b. Elderly Populations*:* Sensory deficits, especially visual and auditory, can impair the ability to interact over a videoconference connection.[51] Clinics ***shall*** consider the use of technologies that can help with visual or auditory impairment. The geriatric patient often has multiple medical problems, many of which affect cognitive/behavioral state, require appropriate laboratory, radiologic, and other diagnostic procedures. The inclusion of family members ***should*** be undertaken as clinically appropriate and with the permission of the patient. Interviewing techniques shall be appropriate for a patient who may be cognitively impaired, or find it difficult to adapt to the technology.

c. Rural Populations: Clinicians working with patients from rural or frontier issues ***shall*** be aware of issues unique to working with rural populations via telehealth.

a. Clinicians ***shall*** discuss firearm ownership, safety, sanctioned use of firearms and meaning of firearms to patients in rural areas. Clinicians ***shall*** be

prepared to negotiate with patients over firearm disposition, and consider involvement of patients' families as appropriate.

b. Clinicians ***shall*** be sensitive of impact of disclosures made during emergency management on patient confidentiality and relationships in small communities.

c. Clinicians ***shall*** consider including families in emergency treatment situations where possible and clinically appropriate, while also assessing and be attentive to exacerbation of family tensions in small communities.

d. Clinicians ***shall*** assess substance issues, be familiar with local resources for substance use assessment and treatment, and be prepared to play a more active role in substance use treatment.[52, 53]

4. Ethical Consideration

Although telemedicine is not a practice in and of itself, practicing at a distance creates a unique relationship with the patient that requires attention to and adherence to professional ethical principles. An organization or health professional that adheres to ethical telemedicine principles ***shall:***

a. Incorporate organizational values and ethics statements into the administrative policies and procedures for telemedicine

b. Be aware of medical and other professional discipline codes of ethics when using telemedicine

c. Inform the patient of their rights and responsibilities when receiving care at a distance (through telemedicine) including the right to refuse to use telemedicine

d. Provide patients and providers with a formal process for resolving ethical questions and issues that might arise as a result of a telemedicine encounter

e. Eliminate any conflict of interest to influence decisions made about, for, or with patients who receive care via telemedicine.

c. Technical Specifications

Videoconferencing is a communications tool that has made possible the recreation of clinical, consultative, and educational settings regardless of the geographic location of participants. A wide array of equipment and standards-based software is available that can greatly enhance the capabilities and usefulness of the videoconferencing system. Telemental health users where available, practical and affordable ***should*** be able to, when cost-effective:

- Display static pictures, diagrams, or objects.
- View and share a computer desktop or applications.
- Play videos or CDs so people at other locations can see and hear them.
- Record meetings when clinically appropriate and with patient permission.
- Share information on a common white board or via computer files.

Other desirable features of a videoconferencing system include:

- Ease of use with minimum operator training.
- Have remote camera control so that a clinician can pan, tilt, and zoom (PTZ) the camera on the patient end for close-ups.
- Easy-to-understand visual cues to give user feedback on features selected.
- On screen messages to notify the user of such conditions as loss of far end video, incomplete or dropped connections, mute/unmute etc.
- Option to view the picture sent as well as the picture received simultaneously (known as 'picture-in-picture' or PIP).
- Audio at 7 kHz full duplex with echo cancellation (capable of eliminating room return audio echo), with easy-to-use mute function and volume adjustment.
- Standard computer and peripheral ports for transmission of data.
- Ability to operate at a bandwidth of 384 Kbps or higher.
- Capacity for software upgrades as improvements become available.

Currently, most videoconferencing takes place via digital telephone lines (ISDN) or over TCP/IP (utilizing a local area network (LAN), wide area network (WAN), or broadband Internet connection). Low bandwidth videophones are often found in home care programs, or in situations or areas where higher bandwidth connections are either unavailable or cost prohibitive. Satellite communications are increasingly being used in remote areas, whether for Internet connectivity, or direct satellite telephony. Conferencing can be established between just two locations (called point-to-point) or among a number of sites simultaneously (called multi-point).

High quality microphones and speakers ensure effective aural communication and ***should*** be used in telemental health consultations to ensure accurate interpretation of the patient's and provider's spoken communication. High-quality audio is essential to the success of telemental health services, capturing the nuances of conversation that are often vital in making appropriate diagnoses. Microphone type and placement are extremely important, as are the acoustical properties of the room used. Most flat "conference-style" microphones are adequate to pick up sounds around a table or in a room, as long as the microphones are placed on a hard, flat surface at desk or table-top level. Many will also work well if placed on a flat wall at about head level for a seated person. If no flat surface is available, or if patients may be active or agitated, an omni-directional microphone can be hung from the center of the ceiling. "Quiet" rooms (those with carpeting, soft furniture, acoustical treatments, or other sound absorbing characteristics) allow for better

intelligibility of transmitted speech.[54, 55 , 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66]

1. Transmission Speed and Bandwidth

Most telemental health programs use systems that transmit data at a minimum of 384 Kbps. Transmission speed ***shall*** be the minimum necessary to allow the smooth and natural communication pace necessary for clinical encounters. Research into the quality of data transmission has shown that viewers perceive a marked difference in quality between 128 and 384 Kbps, but report less noticeable difference between 384 and 768 Kbps, although the proportionate cost increase is often much larger at the higher transmission speed. The use of lower bandwidths is necessary in some locations due to lack of or expense of broadband access and the need to provide services to disparate and/or remote populations. The use of the Internet has gained popularity in recent years as a medium by which providers and patients can bridge the digital gap and remain connected.[67]

2. Image Storage, Retrieval and Transmission

a. ***Security****:* For telemental services provided within the United States, the United States Health Insurance Portability & Accountability Act (HIPAA)[68] and state privacy requirements ***shall*** be followed at all times to protect patient privacy. Privacy requirements in other countries ***shall*** be followed for telemental services provided in those countries. Telemental health services being provided across political boundaries ***shall*** be in conformance with privacy requirements in both locations. Network and software security protocols to protect privacy and confidentiality ***shall*** be provided as well as appropriate user accessibility and authentication protocols. Measures to safeguard data against intentional and unintentional corruption ***shall*** be in place during both storage and transmission.

b. ***Encryption*****:** Within the United States, HIPAA requires that encryption (128 bit) of Electronic Protected Health Information ***shall*** be addressed.[69] Consistent with HIPAA and good practice, video sessions ***shall*** be secured to the greatest practical extent.

c. ***Resolution:*** The resolution of the display monitor ***should*** match as closely as possible the resolution of the acquired image being displayed, or the originally acquired image resolution should be accessible using zoom and pan functions.

d. ***Interoperability:*** Interoperability of videoconferencing equipment has improved significantly in the past few years through a number of standards that have arisen in the industry. Most telecommunications standards are established by the International Telecommunications Union (ITU), an agency of the United Nations. Equipment ***shall*** be based on these standards which allow successful

conferencing regardless of platform or manufacturer. The ITU standards that ***shall*** be used comprise the H (video), G (audio) and T (data) series.

e. ***Videoconferencing with Personal Computers:*** Computers utilized for VTC ***shall*** comply with all facility, state, and federal regulations.

f. ***TCP/IP:*** There are continuing innovations in software protocols designed to assure consistently high quality signals (called "quality of service" or QOS) for videoconferencing systems using IP networks. The use of these protocols (which are usually implemented in the videoconferencing system itself) can significantly improve the quality of transmission over an IP network.

g. ***Integrated Services Digital Network (ISDN):*** Videoconferencing over ISDN is governed by the H.320 ITU standard, which includes a number of associated standards to control video, audio, and data flow. ISDN connections usually use a multiplexer (MUX) to aggregate 2-6 individual phone lines into a single high-bandwidth connection. As each line transmits at 64 kbps, a minimum of 6 lines ***should*** be used to ensure transmission at least at 384 kbps.

3. Physical Location/Room Requirements

a. ***Room Set-up:*** During a telemental health session, both locations ***shall*** be considered a patient examination room regardless of a room's intended use. Both sites ***shall*** be appropriately designed with audio and visual privacy and additionally the originating site ***shall*** have the ability to accommodate posture and movement visualization by the provider.[70] The ability to view written or drawn material ***should*** also be available. Rooms ***shall*** be designated private for the duration of the VTC and no unauthorized access shall be permitted. The organization ***shall*** take every precaution to ensure the privacy of the consult and the confidentiality of the patient. All persons in the exam room at both sites ***shall*** be identified to all participants prior to the consultation and the patient's permission ***shall*** be obtained for any visitors or clinicians to be present during the session.

b. ***Room Lighting:*** The room in which videoconferencing is used ***shall*** be well lit (150 ft candles at the patient is recommended), preferably using light sources as close to day light as possible (i.e., fluorescent day-light or full spectrum bulbs rather than incandescent). The room ***shall*** be comfortably lit for the patient and lit well enough for the provider to see the patient without shadows falling on the patient's face or other areas where clinical data is being displayed (such as lower extremities, hands, etc.). The lighting of the provider's space ***shall*** meet the same requirements in that the patient must be able to see the face of the provider with no shadowing. Daylight is often the softest and more comfortable light for the patient to view the clinician.

c. ***Backdrop:*** Backdrops behind the patient and provider ***should*** be clean and plain in color and not full of distractions such as office papers, book shelves, etc. Blue is an optimum color for backdrops as blue neither reflects or absorbs light, is a calming color, and helps to accentuate the area of interest.

d. ***Ergonomic Considerations*****:** The comfort of the mental health professional undertaking the consultations ***should*** be considered to prevent fatigue and computer vision syndrome problems common with increased computer interactions.[71] *Gaze Angle:* Gaze angle is the angle between the near participant's camera and where the near participant looks at the onscreen far participant (eye contact). The vertical location of the far participant on the screen will affect gaze angle. Gaze angles of approximately 5 to 7 degrees are imperceptible to most persons[1,1]. Gaze angle ***should*** be as small as practical.

d. Administrative Issues

1. Organizations ***shall*** ensure the technical readiness of the telehealth equipment and the clinical environment.[72] Organizations providing telehealth services ***shall*** have processes in place to ensure the safety and effectiveness of equipment through on-going support and maintenance.[73, 74] Organizations providing telehealth services ***shall*** have policies and procedures in place to ensure the physical security of telehealth equipment and the electronic security of data.[75] Organizations ***sha*****ll** have appropriate redundant systems and appropriate recovery procedures in place that ensure availability of the network for critical connectivity. Organizations ***shall*** ensure compliance with all relevant safety laws, regulations, and codes for technology and technical safety.[xiv, xv] Organizations ***shall*** have infection control policies and procedures in place for the use of telehealth equipment and patient peripherals.

2. Policy Related Steps to Optimize Telemental Health Practices

   It is critical to develop policies and procedures to ensure consistent implementation of telemental health program functions. Key policies that ***shall*** be addressed include:

   - Release of information and informed consent
   - Identifying all required patient information for a referral/consultation
   - A reliable process for communicating findings after consults
   - Ensuring privacy and confidentiality
   - Intake procedures and screening
   - Staff roles and responsibilities
   - Transmission of patient data
   - Use of electronic medical records
   - Appointment scheduling; synchronizing schedules at all sites
   - Transmission of prescriptions, lab orders and progress notes

- Evaluation and measurement of patient outcomes
- Quality improvement
- Safety
- Licensing, liability and malpractice insurance
- Continuous training

Appendix

A: Existing Digital Imaging Standards

This is not meant to be a comprehensive list of all existing standards, but rather provides a description of the standards most relevant to the practice of telemental health.

ITU-T: The International Telecommunications Union has established a series of standards (H.300) for VTC. It includes such sections as the H.320 series for circuit-switched, n x 64 (i.e., ITU-T); the H.323series: packet-switched/network, Internet Protocol; and the H.324: Plain Old Telephone Service (POTS).

Session Initiation Protocol (SIP): The Internet Engineering Task Force RFC 3261 also applies to VTC. SIP is a text-based protocol for initiating interactive communication sessions between users, including voice, video, chat, and virtual reality.

JPEG/TIF/WAV: Some of the most common compression methods used for still images include the following. The method used depends on the achievable compression ratio and the number and types of artifacts created during compression. *Lossless compression* allows for the reconstruction of the exact original data prior to compression without any loss of information. *Lossy compression* refers to methods that lose data once the image has been compressed and uncompressed. The level of compression and method used affect the amount of data loss and whether or not it is visually perceptible. The type and level of compression may vary depending on the type of exam. Different compression algorithms will achieve different compression ratios with varying degrees of artifacts. The choice of compression method and level should be reviewed periodically for each image and exam type, to insure that artifacts are not perceptible. It should be noted that lossy compression can affect the colors in an image.

- **JPEG (2000):** JPEG 2000 uses wavelet technology that allows an image to be retained without any distortion or loss. [71] File extensions for JPEG 2000 are either .jp2 or .j2c (traditional JPEG is either .jpg or .jpeg).

- **TIF:** Tagged Image File Format used for formatting and compressing images. It can be lossy or lossless. The file extension TIF is .tiff or .tif.

- **WAV:** A method of compression using wavelets transforms (mathematical functions that divide data based on frequency components). There are a variety of file extensions depending on the wavelet method used. It can be lossy or lossless.

HL7: Health Level Seven is one of several American National Standards Institute (ANSI) Standards Developing Organizations (SDOs) operating in the healthcare arena. Health Level Seven's domain is clinical and administrative data.[76]

US HIPAA: The United Sates Health Insurance Portability & Accountability Act of 1996 (Public Law 104-191)calls for improved efficiency in healthcare delivery by standardizing electronic data interchange, and the protection of confidentiality and security of health data through setting and enforcing standards.[77,78] It has rules for:

- Standardization of electronic patient health, administrative and financial data
- Unique health identifiers for individuals, employers, health plans and health care providers

- Security standards protecting the confidentiality and integrity of "individually identifiable health information," past, present or future.

JCAHO: The Joint Commission evaluates and accredits nearly 15,000 health care organizations and programs in the United States. An independent, not-for-profit organization, The Joint Commission is a standards-setting and accrediting body in health care. Since 1951, The Joint Commission has maintained state-of-the-art standards that focus on improving the quality and safety of care provided by health care organizations. The Joint Commission's comprehensive accreditation process evaluates an organization's compliance with these standards and other accreditation requirements. Joint Commission accreditation is recognized nationwide as a symbol of quality that reflects an organization's commitment to meeting certain performance standards. To earn and maintain The Joint Commission's Gold Seal of Approval™, an organization must undergo an on-site survey by a Joint Commission survey team at least every three years. (Laboratories must be surveyed every two years.)

B: Telemedicine/Telehealth Glossary

The following is a list of terms and definitions that are commonly used in telemedicine and telehealth. The list was assembled for the purpose of encouraging consistency in employing these terms in ATA related documents and resource materials. The list is not all-inclusive and may be augmented by specialty areas as deemed appropriate.

Application Service Provider (ASP): An ASP hosts a variety of applications on a central server. For a fee, customers can access the applications that interest them over secure Internet connections or a private network. This means that they do not need to purchase, install and

maintain the software themselves; instead they rent the applications they need from their ASP. Even new releases, such as software upgrades, are generally included in the price.

Asynchronous: This term is sometimes used to describe store and forward transmission of medical images or information because the transmission typically occurs in one direction in time. This is the opposite of synchronous (see below).

Authentication: A method of verifying the identity of a person sending or receiving information using passwords, keys and other automated identifiers.

Bandwidth: A measure of the information carrying capacity of a communications channel; a practical limit to the size, cost, and capability of a telemedicine service.

Bluetooth Wireless: Bluetooth is an industrial specification for wireless personal area networks (PANs). Bluetooth provides a way to connect and exchange information between devices such as mobile phones, laptops, PCs, printers, digital cameras and video game consoles over a secure, globally unlicensed short-range radio frequency. The Bluetooth specifications are developed and licensed by the Bluetooth Special Interest Group.

Broadband: Communications (e.g., broadcast television, microwave, and satellite) capable of carrying a wide range of frequencies; refers to transmission of signals in a frequency-modulated fashion, over a segment of the total bandwidth available, thereby permitting simultaneous transmission of several messages.

Clinical Information System: Relating exclusively to the information regarding the care of a patient, rather than administrative data, this hospital-based information system is designed to collect and organize data.

CODEC: Acronym for coder-decoder. This is the videoconferencing device (e.g., Polycom, Tandberg, Sony, Panasonic, etc) that converts analog video and audio signals to digital video and audio code and vice versa. CODECs typically compress the digital code to conserve bandwidth on a telecommunications path.

Compressed video: Video images that have been processed to reduce the amount of bandwidth needed to capture the necessary information so that the information can be sent over a telephone network.

Computer-based Patient Record (CPR): An electronic form of individual patient information that is designed to provide access to complete and accurate patient data.

Data Compression: A method to reduce the volume of data using encoding to reduce image processing, transmission times, bandwidth requirements, and storage space requirements. Some compression techniques result in the loss of some information, which may or may not be clinically important.

Diagnostic Equipment (Scopes, Cameras & Other Peripheral Devices): A hardware device not part of the central computer (e.g. digitizers, stethoscope, or camera) that can provide medical data input to or accept output from the computer.

Digital Camera (still images): A digital camera is typically used to take still images of a patient. General uses for this type of camera include dermatology and wound care. This camera produces images that can be downloaded to a PC and sent to a provider/consultant over a network.

Digital Imaging and Communication in Medicine (DICOM): A standard for communications among medical imaging devices; a set of protocols describing how images are identified and formatted that is vendor-independent and developed by the American College of Radiology and the National Electronic Manufacturers Association.

Disease Management: A continuous coordinated health care process that seeks to manage and improve the health status of a carefully defined patient population over the entire course of a disease (e.g., CHF, DM) The patient populations targeted are high-risk, high-cost patients with chronic conditions that depend on appropriate care for proper maintenance.

Distance Learning: The incorporation of video and audio technologies, allowing students to "attend" classes and training sessions that are being presented at a remote location. Distance learning systems are usually interactive and are a tool in the delivery of training and education to widely dispersed students, or in instances in which the instructor cannot travel to the student's site.

Distant Site: The distant site is defined as the telehealth site where the provider/specialist is seeing the patient at a distance or consulting with a patient's provider. (CMS) Others common names for this term include – hub site, specialty site, provider/physician site and referral site. The site may also be referred to as the consulting site.

Document Camera: A camera that can display written or typed information (e.g., lab results), photographs, graphics (e.g., ECG strips) and in some cases x-rays.

Electronic Data Interchange (EDI): The sending and receiving of data directly between trading partners without paper or human intervention.

Electronic Patient Record: An electronic form of individual patient information that is designed to provide access to complete and accurate patient data, alerts, reminders, clinical decision support systems, links to medical knowledge, and other aids.

Encryption: A system of encoding data on a Web page or e-mail where the information can only be retrieved and decoded by the person or computer system authorized to access it.

Firewall: Computer hardware and software that block unauthorized communications between an institution's computer network and external networks.

Full-motion Video: This describes a standard video signal that allows video to be shown at the distant end in smooth, uninterrupted images.

Guideline: A statement of policy or procedures by which to determine a course of action, or give guidance for setting standards (Loane & Wootton, 2002).

H.320: This is the technical standard for videoconferencing compression standards that allow different equipment to interoperate via T1 or ISDN connections.

H.323: This is the technical standard for videoconferencing compression standards that allow different equipment to interoperate via the Internet Protocol (see below).

H.324: This is the technical standard for videoconferencing compression standards that allow different equipment to interoperate via Plain Old Telephone Service (POTS).

Health Level-7 Data Communications Protocol (HL-7): This communication standard guides the transmission of health-related information. *HL7* allows the integration of various applications, such as bedside terminals, radiological imaging stations, hospital census, order entries, and patient accounting, into one system.

HIPAA: Acronym for Health Information Portability Act.

Home Health Care & Remote Monitoring Systems: Home health care is care provided to individuals and families in their place of residence for promoting, maintaining, or restoring health; or for minimizing the effects of disability and illness, including terminal illness. In the Medicare Current Beneficiary Survey and Medicare claims and enrollment data, home health care refers to home visits by professionals including nurses, physicians, social workers, therapists, and home health aides. Using remote monitoring and interactive devices allows the patient to send in vital signs on a regular basis to a provider without the need for travel.

Informatics: The use of computer science and information technologies to the management and processing of data, information and knowledge.

Integrated Services Digital Network (ISDN): This is a common dial-up transmission path for videoconferencing. Since ISDN services are used on demand by dialing another ISDN based device, per minute charges accumulate at some contracted rate and then are billed to the site placing the call. This service is analogous to using the dialing features associated with a long distance telephone call. The initiator of the call will pay the bill. ISDN permits connections up to 128Kbps.

Interactive Video/Television: This is analogous with video conferencing technologies that allow for two-way, synchronous, interactive video and audio signals for the purpose of delivering telehealth, telemedicine or distant education services. It is often referred to by the acronyms – ITV, IATV or VTC (video teleconference).

Internet Protocol: The Internet Protocol (IP) is the protocol by which data is sent from one computer to another on the Internet. Each computer on the Internet has at least one address that uniquely identifies it from all other computers on the Internet. IP is a connectionless protocol, which means that there is no established connection between the end points that are communicating. The IP address of a videoconferencing system is its phone number.

Interoperability: Interoperability refers to the ability of two of more systems* to interact with one another and exchange information in order to achieve predictable results (*refers to more than technical systems) (Bergman, Ulmer and Sargious, 2001). There are three types of interoperability: human/operational; clinical; and technical (Canadian Society for Telehealth, 2001). Interoperability refers to the ability of two or more systems (computers, communication devices, networks, software, and other information technology components) to interact with one another and exchange data according to a prescribed method in order to achieve predictable results (ISO ITC-215).

ISDN Basic Rate Interface (BRI): This is an ISDN interface that provides 128k of bandwidth for videoconferencing or simultaneous voice and data services. Multiple BRI lines can be linked together using a multiplexer (see below) to achieve higher bandwidth levels. For instance, a popular choice among telehealth networks is to combine 3 BRI lines to provide 384k of bandwidth for video-conferencing. It should be noted that BRI services are not available in some rural locations. One should check with their telecommunications providers on the availability of BRI service before ordering videoconferencing equipment that uses this type of service.

ISDN Primary Rate Interface (PRI): This is an ISDN interface standard that operates using 23, 64k channels and one 64k data channel. With the proper multiplexing equipment the ISDN PRI channels can be selected by the user for a video call. For instance if the user wants to have a videoconference at 384k of bandwidth then they can instruct the multiplexer to use channels 1 through 6 (6 x 64k = 384k). This is important because the user typically pays charges based on the number of 64k channels used during a videoconference. The fewer channels used to obtain a quality video signal the less expensive the call.

JCAHO: Acronym for Joint Commission on Accreditation of Healthcare Organizations.

Lossless: A format of data compression, typically of an order of less than 2:1, in which none of the original data information is lost when the image is reproduced.

Lossy: A process of data compression at a relatively high ratio, which leads to some permanent loss of information upon reconstruction.

Medical/ Nursing Call Center: A call center is a centralized office that answers incoming telephone calls from patients. Such an office may also respond to letters, faxes, e-mails and similar written correspondence. Usually staffed by nurses, call centers provide basic health information and instructions to callers but do not provide an official diagnosis of conditions or prescribe medicine. Call centers act as an initial triage point for patients.

Mobile Telehealth: The provision of health care services with the assistance of a van, trailer, or other mobile unit in which the health care provider might provide patient services at a distance from a normal medical facility. Services may also be provided through mobile technologies that allow a mobile vehicle equipped with medical technologies to attach to an existing health care facility, such as mobile CT, MRI, or teledentistry.

Multiplexer (MUX): A device that combines multiple inputs (ISDN PRI channels or ISDN BRI lines) into an aggregate signal to be transported via a single transmission path.

Multi-point Control Unit (MCU): A device that can link multiple videoconferencing sites into a single videoconference. An MCU is also often referred to as a "bridge".

Multi-point Teleconferencing: Interactive electronic communication between multiple users at two or more sites which facilitates voice, video, and/or data transmission systems: audio, graphics, computer and video systems. Multi-point teleconferencing requires a MCU or bridging device to link multiple sites into a single videoconference.

Network Integrators: Organizations specializing in the development of software and related services that allows devices and systems to share data and communicate to one another.

Originating Site: The originating site is where the patient and/or the patient's physician is located during the telehealth encounter or consult (CMS). Other common names for this term include – spoke site, patient site, remote site, and rural site.

Patient Exam Camera (video): This is the camera typically used to examine the general condition of the patient. Types of cameras include those that may be embedded with set-top videoconferencing units, handheld video cameras, gooseneck cameras, camcorders, etc. The camera may be analog or digital depending upon the connection to the videoconferencing unit.

Peripheral Devices: Any device that is attached to a computer externally, i.e. Scanners, mouse pointers, printers, keyboards; and clinical monitors such as pulse oximeters, weight scales, are all examples of this.

Pharmacy Solutions: The use of electronic information and communication technology to provide and support comprehensive pharmacy services when distance separates the participants.

POTS: Acronym for Plain Old Telephone Service.

Presenter (Patient Presenter): Telehealth encounters require the distant provider to perform an exam of a patient from many miles away. In order to accomplish that task an individual with a clinical background (e.g., LPN, RN, etc) trained in the use of the equipment must be available at the originating site to "present" the patient, manage the cameras and perform any "hands-on" activities to successfully complete the exam. For example, a neurological diagnostic exam usually requires a nurse capable of testing a patient's reflexes and other manipulative activities. It should be noted that in certain cases, such as interview based clinical consultations such as Telemental Health or Nutrition Services, that a licensed practitioner such as an RN or LPN, might not be necessary, and a non-licensed provider such as support staff, could provide telepresenting functions.

RHIO: Regional Health Information Organization (RHIO) and Health Information Exchange (HIE) are often used interchangeably. RHIO is a group of organizations with a business stake in improving the quality, safety, and efficiency of healthcare delivery. RHIOs are the building blocks of the proposed National Health Information Network (NHIN) initiative at the Office of the National Coordinator for Health Information Technology (ONCHIT).

Router: This device provides an interface between two networks or connects sub-networks within a single organization. It routes network traffic between multiple locations and it can find the best route between any two sites. For example, PCs or H.323 videoconferencing devices tell the routers where the destination device is located and the routers find the best way to get the information to that distant point.

Standard: A statement established by consensus or authority, that provides a benchmark for measuring quality, that is aimed at achieving optimal results (NIFTE Research Consortium, 2003).

Store and Forward (S&F): S&F is a type of telehealth encounter or consult that uses still digital images of a patient for the purpose of rendering a medical opinion or diagnosis. Common types of S&F services include radiology, pathology, dermatology and wound care. Store and forward also includes the asynchronous transmission of clinical data, such as blood glucose levels and electrocardiogram (ECG) measurements, from one site (e.g., patient's home) to another site (e.g., home health agency, hospital, clinic).

Switch: A switch in the videoconferencing world is an electrical device that selects the path of the video transmission. It may be thought of as an intelligent hub (see hub above) because it can be programmed to direct traffic on specific ports to specific destinations. Hub ports feed the same information to each device.

Synchronous: This term is sometimes used to describe interactive video connections because the transmission of information in both directions is occurring at exactly the same period.

System/Network Integration: The use of software that allows devices and systems to share data and communicate to one another.

T1/DS1: A digital carrier or type of telephone line service offering high-speed data, voice, or compressed video access in two directions, with a transmission rate of 1.544 Mbps.

T3/DS3: A carrier of *45* Mbps.

TCP/IP (Transmission Control Protocol/Internet Protocol): The underlying communications rules and protocols that allow computers to interact with each other and exchange data on the Internet.

Telecommunications Providers: An entity licensed by the government (the Federal Communications Commission in the U.S.) to provide telecommunications services to individuals or institutions.

Teleconferencing: Interactive electronic communication between multiple users at two or more sites which facilitates voice, video, and/or data transmission systems: audio, graphics, computer and video systems.

Telehealth and Telemedicine: Telemedicine and telehealth both describe the use of medical information exchanged from one site to another via electronic communications to improve patients' health status. Although evolving, telemedicine is sometimes associated with direct patient clinical services and telehealth is sometimes associated with a broader definition of remote healthcare services.

Telematics: The use of information processing based on a computer in telecommunications, and the use of telecommunications to permit computers to transfer programs and data to one another.

Telementoring: The use of audio, video, and other telecommunications and electronic information processing technologies to provide individual guidance or direction. An example of this help may involve a consultant aiding a distant clinician in a new medical procedure.

Telemonitoring: The process of using audio, video, and other telecommunications and electronic information processing technologies to monitor the health status of a patience from a distance.

Telepresence: The method of using robotic and other instruments that permit a clinician to perform a procedure at a remote location by manipulating devices and receiving feedback or sensory information that contributes to a sense of being present at the remote site and allows a satisfactory degree of technical achievement. For example, this term could be applied to a surgeon using lasers or dental hand pieces and receiving pressure similar to that created by

touching a patient so that it seems as though s/he is actually present, permitting a satisfactory degree of dexterity.

Teleradiology and Picture Archiving and Communications Systems (PACs): The electronic transmission of radiological images, such as x-rays, CTs, and MRIs, for the purposes of interpretation and/or consultation. Digital images are transmitted over a distance using standard telephone lines, satellite connections, or local area networks (LANs). Teleradiology also is beginning to include the process of interfacing with the hospital information systems/radiology information systems (HIS/RIS) in the transport of digital images. PACs provide centralized storage and access to medical images over information systems.

Ultrasound: A device that uses high-frequency sound waves to examine structures inside the body. It can rapidly detect tumors and other abnormalities, often right in the physician's office.

Universal Service Administrative Company (USAC): The Universal Service Administrative Company administers the Universal Service Fund (USF), which provides communities across the country with affordable telecommunication services. The Rural Health Care Division (RHCD) of USAC manages the telecommunications discount program for health care.

Videoconferencing Systems: Equipment and software that provide real-time, generally two way transmission of digitized video images between multiple locations; uses telecommunications to bring people at physically remote locations together for meetings. Each individual location in a *videoconferencing* system requires a room equipped to send and receive video.

Videoconferencing: Real-time, generally two way transmission of digitized video images between multiple locations; uses telecommunications to bring people at physically remote locations together for meetings. Each individual location in a *videoconferencing* system requires a room equipped to send and receive video.

WiFi: Originally licensed by the Wi-Fi Alliance to describe the underlying technology of wireless local area networks (WLAN) based on the IEEE 802.11 specifications. It was developed to be used for mobile computing devices, such as laptops, in LANs, but is now increasingly used for more services, including Internet and VoIP phone access, gaming, and basic connectivity of consumer electronics such as televisions and DVD players, or digital cameras. (Wikipedia)

Appendix C: DA Form 4700 (7)

1st DRAFT CY JUN 15, 2011	**MEDICAL RECORD-SUPPLEMENTAL MEDICAL DATA** For use of this form, see AR 40-66; the proponent agency is the Office of The Surgeon General.	1st DRAFT CY JUN 15, 2011

REPORT TITLE TELEHEALTH CONSENT - Authorization to Receive or Record Telehealth Services For use of this form, see MEDCOM Suppl XX to AR 40-66; the proponent agency is the Office of The Surgeon General.	OTSG APPROVED *(Date)* *(YYYYMMDD)*

SECTION I – PATIENT DATA

1. NAME (Last, First, Middle Initial)	2. DATE OF BIRTH (YYYY/MM/DD)
3. E-MAIL ADDRESS:	4. TELEPHONE NUMBER:

SECTION II – TELEHEALTH OVERVIEW

Telehealth is the delivery of healthcare services using audio, visual, and/or data communications technology when the treating healthcare provider and patient are not in the same physical location. Electronically transmitted information may be used for diagnosis, treatment, follow-up, consultation between providers, or patient education. For this application it involves interactive audio and/or video communications and/or recording of those communications.

My provider wishes to engage me in: Telehealth Video Teleconference (VTC) *(Real time communication)* **OR** Recording Telehealth VTC *(Recording real time communication)*

For receipt of the following medical service(s):

SECTION III – CONDITIONS FOR THE USE OF TELEHEALTH SERVICES

1. The details of your medical history and current condition, including your protected health information (PHI), may be used by or shared with the distant healthcare provider to facilitate telehealth services.

2. The records that result from examination and care via VTC or store-and-forward telehealth is part of your military medical record and is protected as required by the Health Insurance Portability and Accountability Act (HIPAA).

3. Security measures have been taken to ensure that your PHI is protected during electronic transmission and not accessed by unauthorized users. These security measures include the use of a private network and an encryption tool.

4. You are free to choose between a telehealth service and a traditional face-to-face service. Participation in telehealth services is voluntary. You may withdraw your consent to participate in telehealth services at any time without affecting your right to future healthcare treatment and services.

5. In the unusual circumstance that a healthcare provider wishes to record a telehealth VTC encounter, your permission will be required, and you will be asked to provide written informed consent for the recording. This is provided in Section IX of this form.

SECTION IV – LIKELY DIFFERENCES BETWEEN RECEIVING CARE USING TELEHEALTH VERSUS FACE-TO-FACE CARE

Not as many medical services and procedures are available via telehealth as face-to-face care.

SECTION V – POTENTIAL BENEFITS OF USING TELEHEALTH

1. Improved access to specialized medical care that may not be locally available otherwise.

2. Reduced wait time for appointments.

3. Reduced travel time to appointments.

4. Less time away from duty.

PREPARED BY *(Signature & Title)*	DEPARTMENT/SERVICE/CLINIC	*DATE (YYYYMMDD)*

PATIENT'S IDENTIFICATION *(For typed or written entries give: Name last, first, middle; grade; date; hospital or medical facility)*	HISTORY/PHYSICAL OTHER EXAMINATION OR EVALUATION DIAGNOSTIC STUDIES TREATMENT	FLOW CHART OTHER *(Specify)*

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SECTION VI – POTENTIAL RISKS OF USING TELEHEALTH SERVICES

1. Delays in medical evaluation and treatment could occur due to equipment transmission delays or failure.

2. Security measures such as the use of a private network and an encryption tool have been taken to ensure that your PHI is protected and not accessed by unauthorized users. Healthcare providers cannot guarantee but will use reasonable means to maintain the security and confidentiality of the information sent and received via telehealth.

3. Telehealth services are intended to be of benefit but, as with all healthcare interventions, beneficial results cannot be guaranteed or assured.

SECTION VII – ADDITIONAL INFORMATION

[LEGALITY OF CONSENT IS DETERMINED BY THE LAW OF THE STATE IN WHICH THE FACILITY IS LOCATED, UNLESS PREEMPTED BY FEDERAL LAW OR AS MODIFIED IN OVERSEAS LOCATIONS. ANY ADDITIONAL STATE-MANDATED LANGUAGE CAN BE PLACED IN AN ATTACHMENT TO THIS DOCUMENT.]

SECTION VIII – COMPLETE THIS SECTION FOR RECORDING OF VTC ENCOUNTER ☐ NOT APPLICABLE

1. On some occasions, certain procedures may be audiotaped, videotaped, or observed. This may include diagnosis, treatment, follow-up, and/or patient education regarding your medical care.

2. The purpose of this practice is to ensure the provision of high quality services through supervision of the work and/or use in the ongoing program of professional training at this medical center.

Patient Location (Hospital or Facility Name): _____

Referring Provider (Name/Title): _____ Location: _____

Telehealth Service Provider (Name/Title): _____ Location: _____

SECTION IX – PATIENT ACKNOWLEDGEMENT AND AGREEMENT

1. I have read and understand the information in this authorization form. I consent to having medical services provided by telehealth.

2. My healthcare provider has explained the alternative methods of medical care that may be available to me and the likely benefits and risks associated with these alternatives to deliver care in my situation. I have had any additional questions answered to my satisfaction.

3. By signing this form, I acknowledge the advantages and disadvantages associated with using telehealth services and authorize my health care providers to arrange telehealth services for the purpose of providing medical advice, diagnosis, education, consultation between providers, and/or treatment.

4. I understand that I have the right to revoke this authorization in writing at any time.

5. If "Recording Telehealth VTC" is checked in Section II, I consent to, and authorize the production of, auditory recordings, videotape recordings, closed circuit television, or other recorded observations. I understand that all materials and information will be handled strictly in accordance with professionally accepted standards of ethics and confidentiality.

Patient Signature: _____ Date: _____

Relationship of Patient Guardian/Parent *(if other than patient):* _____ ☐ NOT APPLICABLE

Witness Signature: _____ Date: _____

Advising Signature: _____ Date: _____

(Referring provider or authorized representative)

Appendix D: Development of the telehealth usability questionnaire (19)

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DEVELOPMENT OF THE TELEHEALTH USABILITY QUESTIONNAIRE (TUQ)

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ABSTRACT

Current telehealth usability questionnaires are designed primarily for older technologies, where telehealth interaction is conducted over dedicated videoconferencing applications. However, telehealth services are increasingly conducted over computer-based systems that rely on commercial software and a user supplied computer interface. Therefore, a usability questionnaire that addresses the changes in telehealth service delivery and technology is needed. The Telehealth UsabilityQuestionnaire (TUQ) was developed to evaluate the usability of telehealth implementation and services. This paper addresses: (1) the need for a new measure of telehealth usability, (2) the development of the TUQ, (3) intended uses for theTUQ, and (4) the reliability of the TUQ. Analyses indicate that the TUQ is a solid, robust, and versatile measure that can be used to measure the quality of the computer-based user interface and the quality of the telehealth interaction and services.

***Keywords**: Telehealth, Telehealth Usability Questionnaire (TUQ), Usability*

In order to reap the potential benefits of telehealth technologies, the delivery system has to be usable for both patients and clinicians. Usability is the extent to which a product can be used by specified users to achieve specifiedgoals with effectiveness, efficiency, and satisfaction in a specified context of use (ISO, 1992). This construct is a key to making systems easy to learn and easy to use (Nielsen & Mack, 1994). Measuring the usability of telehealth technology offers a way to evaluate and improve the effectiveness of both the technology and services delivered.

Traditionally, telehealth and telemedicine have been conducted over videoconferencing technologies such as Cisco-Tandberg and Polycom. Systems such as Cisco- Tanberg and Polycom are designed for the sole purpose of videoconferencing. However, recent advances in technologies allow videoconferencing to be conducted usingmulti-purpose computer technologies. Examples include VSee, Adobe Connect, and Cisco WebEx. These multi- purpose technologies allow consumers to deliver telehealth using computer software applications instead of traditional videoconferencing systems which are primarily hardware based. In addition to multi-purpose technology, there have been software applications developed specifically for telehealth purposes. These include the Versatile IntegratedSystem for Telerehabilitation (VISYTER) (Parmanto et al., 2010) and EHAB (Peel, Russel, & Gray, 2011) systems.

A review of the literature found a number of telehealth questionnaires developed mostly in the early 2000s, including the Telemedicine Satisfaction Questionnaire (TSQ)(Yip, Chang, Chan, & MacKenzie., 2003), Telemedicine Patient Questionnaire (TMPQ) (Demeris et al., 2000; 2004), and Telemedicine Satisfaction and Usefulness Questionnaire (TSUQ) (Bakken, 2009). However, the questionnaires developed in these previous studies were designed to evaluate special purpose videoconferencing technologies. In order to reap the potential benefits of current telehealth technologies, the delivery system has to be usable for both patients and clinicians. The questionnaires commonly employed to measure usability of a telehealth system, including user experience and satisfaction with various aspects of the technology or

service, typically use a Likert scale approach to assessment (Mair & Whitten, 2000). Since telehealth technology connects clinicians and patients over a distance, the usability questionnaire is designed to measure the quality of the interactions between two sites (e.g., audiovisual quality, quality of communications, ease of use of the equipment) (Houston & Burton, 1997), and the overall impression of the service (i.e., level of comfort and satisfaction with the telemedicine encounter) (Bakken et al., 2006; Yip et al., 2003).

The objective of the present study is to report on the development and reliability assessment of a new usability tool, the Telehealth Usability Questionnaire (TUQ). The TUQ combines items from existing telehealth questionnaires with those from computer usability questionnaires, and was designed to be a comprehensive questionnaire that covers all usability factors (i.e., usefulness, ease of use, effectiveness, reliability, and satisfaction). The TUQ is intended for both clinicians and patients. In addition, the TUQ is intended for use with various types of telehealth systems, including the traditional videoconferencing systems, computer-based systems, and the new generation of mobile telehealth systems. As such, the TUQ utilizes questions that can be modified to correctly address the participants (clinicians or patients) and the telehealth system.

METHODS

QUESTIONNAIRE DEVELOPMENT

Development of the TUQ consisted of four phases: (1) literature review; (2) construct development; (3) item development; and (4) examination of reliability. Each of these phases will be covered in the subsequent sections.

BACKGROUND ON EXISTING QUESTIONNAIRES

A literature review was conducted to identify existing questionnaires that have been widely used in the evaluation of telemedicine and computer/information technology. Identified questionnaires that were used as models for the TUQ were primarily from two fields: telemedicine and computer and information technology.

In the field of telemedicine the following questionnaires were identified: the Telemedicine Satisfaction Questionnaire (TSQ) (Yip et al., 2003), Telemedicine Patient Questionnaire (TMPQ) (Demeris et al., 2000; 2004), and Telemedicine Satisfaction and Usefulness Questionnaire (TSUQ) (Bakken, 2009). Telemedicine questionnaires focus on three factors of usability: usefulness, satisfaction, and interaction quality between patient and clinician over telemedicine technology. The TSQ clearly addresses the three usability factors central to telehealth. For example, it includes items unique to telemedicine such as audio and video quality. TSQ is a questionnaire designed specifically for telemedicine systems. TSQ was also designed for traditional interactive videoconferencing systems such as Polycom or Cisco Tandberg. One main difference between traditional videoconferencing systems and new generation computer-based systems is that the former type of system does not have a user interface that clinicians and patients interact with, which is the case with computer-based systems such as VSee. The traditional videoconferencing systems are usually setup by a technician, and the user (patient and clinician) does not need to know how to setup and interact with the system. This means that the TSQ lacks the items related to interface quality that are important for computer/software-based telehealth. However, because items of the TSQ so clearly address the usability factors central to telehealth, it was identified as a primary source of questionnaire items for the TUQ.

In the field of information and computer technology the following questionnaires were identified: the Technology Acceptance Model (TAM) (Davis 1993), and the IBM Post-Study System Usability Questionnaire (PSSUQ) developed by Lewis (1995). The TAM (Davis 1993) describes the relationships between perceived qualities of system usage, affective attitude, and behavioral responses to the system. This questionnaire is used widely in the business information arena. We derived questions related to the usability factors of usefulness and ease of use from the TAM. The PSSUQ measures system usability via a multitude of aspects, including system function, information and interface quality, to users' satisfaction level. The evaluation covers the standards of effectiveness, efficacy and satisfaction (Lewis, 1995). From the PSSUQ, we derived items for ease of use, interface quality, reliability, and satisfaction.

USABILITY ATTRIBUTES OF A TELEHEALTH SYSTEM

The TUQ was designed to be a comprehensive questionnaire that covers all usability factors, including usefulness, ease of use, effectiveness, reliability, and satisfaction. The following is a brief description of each of the usability factors assessed in the TUQ.

USEFULNESS

Usefulness refers to the users' perception of how the telehealth system functions to provide a healthcare interaction/service similar to the traditional in-person encounter. The system is useful when it works and has positive effects on clinical outcomes or reduces clinical cost (Ekeland, Bowes, & Flottorp, 2010).

EASE OF USE AND LEARNABILITY

The system should be easy to learn and use to facilitate rapid work completion (Chen et al., 2009). A system that is easy to learn allows users to build on their knowledge without deliberate effort. For example, a system with intuitive icons is easier to use and to learn than command-based system.

INTERFACE QUALITY

Interface quality measures the interaction between the patient and the telemedicine technology or computer system. This includes the quality of the graphical user interface, the ease of navigation, and an overall impression of how the patient interacts with the telehealth system. This usability attribute was not part of previous telemedicine questionnaires because the telemedicine systems in the past did not have an interface; they were primarily just hardware that needed to be turned on. The Interface Quality sub-scale deals with how pleasant the system was to use for the consumer. It measures if s/he liked the system and if the system had all the functionality and capabilities s/he expected. For example, systems like VSee have a graphical user interface, while most old videoconferencing systems primarily consist of hardware.

INTERACTION QUALITY

Interaction quality measures patient interactions with the clinician, including the quality of the audio and the video, and the similarity of the telehealth interaction between patient and clinician to an in-person interaction. This construct is unique to telehealth and has been the focus of many of the telemedicine questionnaires (Demeris, 2000; Yip et al., 2003).

RELIABILITY

Reliability refers to how easily the user can recover from an error and how the system provides guidance to the user in the event of error. For example, if a user clicks a wrong button, the system provides a means to undo the error or to back track. Ideally, telehealth systems should be as reliable as in-person service. Reliability and validity of data transmission are essential to the safety of patients (Schlachta-Fairchild, Elfrink, & Deickman, 2008).

SATISFACTION AND FUTURE USE

This factor is related to overall satisfaction of the user with the telehealth system and how willing the user would be to use the system in the future.

Table 1 shows the usability components of the TUQ and questionnaire items for each. The table also shows the source of the questionnaire items. The telehealth-related questionnaires are primarily taken from TSQ (Yip et al., 2003). These items are related to usefulness, interaction quality, and satisfaction and future use. The items related to computer and user interface are primarily taken from PSSUQ (Lewis, 1995); these items elicit information about ease of use and learnability, interface quality, satisfaction and future use. The items in the reliability component that are taken from TSQ are related to the reliability of telehealth service, and those from PSSUQ are related to system reliability. The satisfaction and future use component includes questions from both TSQ and PSSUQ. Questionnaire items on ease of use and learnability were also borrowed from TAM, and items on usefulness were also taken from TAM and use similar wording.

Table 1. Usability Components and Questionnaire Items and Their Source

Components	Questionnaire Items	TAM	TSQ	PSSUQ
Usefulness				
1	Telehealth improves my access to healthcare services	S	Y	
2	Telehealth saves me time traveling to a hospital or specialist clinic	S	Y	
3	Telehealth provides for my healthcare needs	S	Y	
Ease of Use and Learnability				
1	It was simple to use this system	Y	S	Y
2	It was easy to learn to use the system	Y		Y
3	I believe I could become productive quickly using this system	Y		Y

Interface Quality				
1	The way I interact with this system is pleasant			Y
2	I like using the system			Y
3	The system is simple and easy to understand	S		Y
4	This system is able to do everything I would want it to be able to do	S		Y
Interaction Quality				
1	I could easily talk to the clinician using the telehealth system		Y	
2	I could hear the clinician clearly using the telehealth system		Y	
3	I felt I was able to express myself effectively		Y	
4	Using the telehealth system, I could see the clinician as well as if we met in person		Y	
Reliability				
1	I think the visits provided over the telehealth system are the same as in-person visits		Y	
2	Whenever I made a mistake using the system, I could recover easily and quickly	S		Y
3	The system gave error messages that clearly told me how to fix problems			Y
Satisfaction and Future Use				
1	I feel comfortable communicating with the clinician using the telehealth system		Y	Y
2	Telehealth is an acceptable way to receive healthcare services	S	Y	Y
3	I would use telehealth services again		Y	
4	Overall, I am satisfied with this telehealth system		Y	Y

Note. Y = taken from the questionnaire with no or slight change; S = Similar item with different wording exists in the questionnaire.

USABILITY FACTORS

The TUQ uses a broader definition of usability that takes into account the utility and the usability of the technology. Utility refers to whether the technology's functionality does what users need (Nielsen, 2012). Usability is the extent to which a product can be used by users to achieve specified goals with effectiveness, efficiency and satisfaction (ISO, 1992). Early work in telehealth usability evaluation was primarily focused on patient satisfaction (Aoki et al., 2003; Heinzelmann, Williams, Lugn, & Kvedar , 2005), while later work incorporated satisfaction, usefulness, ease of use, and interaction quality (Bakken, 2006; Demiris, 2000, 2001, 2004; Yip et al., 2003), all of which are measures of effectiveness. The TUQ usability factors include usefulness, ease of use, effectiveness, reliability, and satisfaction. The relationship among the TUQ usability components, questionnaire items, and usability factors is depicted in Table 2.

Table 2. Usability Components, Questionnaire Items, and Usability Factors

Components	**Factors**	**Usefulness**	**Ease of use**	**Effectiveness**	**Reliability**	**Satisfaction**
Usefulness						
1	Telehealth improves my access to healthcare services	X				

2	Telehealth saves me time traveling to a hospital or specialist clinic	X				
3	Telehealth provides for my healthcare needs	X				
Ease of Use & Learnability						
1	It was simple to use this system		X			
2	It was easy to learn to use the system		X			
3	I believe I could become productive quickly using this system		X			
Interface Quality						
1	The way I interact with this system is pleasant		X			
2	I like using the system		X			
3	The system is simple and easy to understand		X			
4	This system is able to do everything I would want it to be able to do			X		
Interaction Quality						
1	I could easily talk to the clinician using the telehealth system			X		
2	I could hear the clinician clearly using the telehealth system			X		
3	I felt I was able to express myself effectively			X		
4	Using the telehealth system, I can see the clinician as well as if we met in person			X		
Reliability						
1	I think the visits provided over the telehealth system are the same as in-person visits				X	
2	Whenever I made a mistake using the system, I could recover easily and quickly				X	
3	The system gave error messages that clearly told me how to fix problems				X	
Satisfaction and Future Use						
1	I feel comfortable communicating with the clinician using the telehealth system					X
2	Telehealth is an acceptable way to receive healthcare services					X
3	I would use telehealth services again					X
4	Overall, I am satisfied with this telehealth system					X

CONTENT VALIDITY

Because the questionnaire items included in the TUQ were combined from existing sources in telemedicine and computer software interface, the content validity of the questionnaire items was reported in previous studies (Bakken, 2006; Lewis, 1994; Yip et al., 2003). Additionally, the content validity of the TUQ has been shown in previous studies (Parmanto et al., 2011; Schutte et al., 2013; Yu et al., 2015a, 2015b).

CONTENT RELIABILITY

PARTICIPANTS

Fifty-three participants (21 males and 32 females) took part in this study. Participants were recruited from the University of Pittsburgh and included individuals with (56.6%) and without (43.4%) experience utilizing telehealth technology. To be included in the study participants could not have completed the TUQ within the last three months. Table 3 provides characteristics of the participants.

Table 3. Participant Characteristics

Characteristic	n	Percent (%)
Gender		
Male	21	39.6
Female	32	60.4
Highest Level of Education		
Completed some college	17	32.1
Associate's degree	1	1.9
Bachelor's degree	6	11.3
Completed some postgraduate	11	20.8
Master's degree	11	20.8
PhD, law or medical degree	7	13.2
Race/Ethnicity		
African American	3	5.6
Asian	5	9.5
Hispanic	2	3.7
Caucasian	42	79.2
Other	1	2
Experience with Telehealth		
None	23	43.4
Less than 3 months	8	15.1
3 to 6 months	5	9.5
6 months to 1 year	2	3.7
More than 1 year	15	28.3

PROCEDURE

Basic demographic information was collected via interview, and the TUQ was completed independently by participants. All participants were directed to complete the TUQ based on their experience with the VISYTER system. Two participant perspectives were needed (clinicians and clients). Participants who regularly used telehealth technology and identified as "clinicians" were asked to complete the TUQ based on their most recent interaction with the VISYTER application. Participants who had never or did not regularly use telehealth technology were asked to take part in a simulated telehealth session as a client. The simulated telehealth session was designed to approximate an initial session that would occur between a rehabilitation practitioner and a new client. This allowed simulation participants to complete the TUQ from the "client" perspective, as they assumed the client role. These participants interacted with study staff, who assumed the clinician role via VISYTER. After completing the simulated telehealth session, both sets of participants (clinicians based on their prior experience and clients based on their experiences with the simulation) were asked to complete the TUQ.

DATA ANALYSIS

The TUQ ratings by factor were compared using Cronbach's coefficient alpha. This statistic is most often used as a measure of internal consistency and is used to evaluate if items in a scale are measuring the same construct (Portney & Watkins, 2009). Guidelines for evaluating Cronbach's coefficient alpha are presented in Table 4.

Table 4: Cronbach's Coefficient Alpha Ranges of Acceptability

Scale	Rating
$\alpha \geq 0.9$	Excellent
$0.8 \leq \alpha < 0.9$	Good
$0.7 \leq \alpha < 0.8$	Acceptable
$0.6 \leq \alpha < 0.7$	Questionable
$0.5 \leq \alpha < 0.6$	Poor
$\alpha < 0.5$	Unacceptable

RESULTS

All usability attributes of the TUQ were found to have "good" to "excellent" reliability. Raw and standardized Cronbach's coefficient alpha values for each are presented in Table 5. Refer back to Table 2 to view the subscales of the TUQ.

Table 5. Internal Consistency of the TUQ Subscales

Variable	**Cronbach Coefficient Alpha**	
	Raw	*Standardized*
Usefulness	0.83	0.85
Ease of Use	0.92	0.93
Effectiveness	0.86	0.87
Reliability	0.79	0.81
Satisfaction	0.91	0.92

DISCUSSION

The TUQ was developed in response to the ever-evolving technology within telehealth today. There is a need for a usability measure that exhibits the attributes of usefulness, ease of use and learnability, interface quality, interaction quality, reliability, satisfaction, and future use. These salient features must be present in measuring computer-based telehealth technologies. Building on the best measures currently available in telehealth and in information technology and computer science, we have designed the TUQ to include the above-mentioned attributes and to be psychometrically robust.

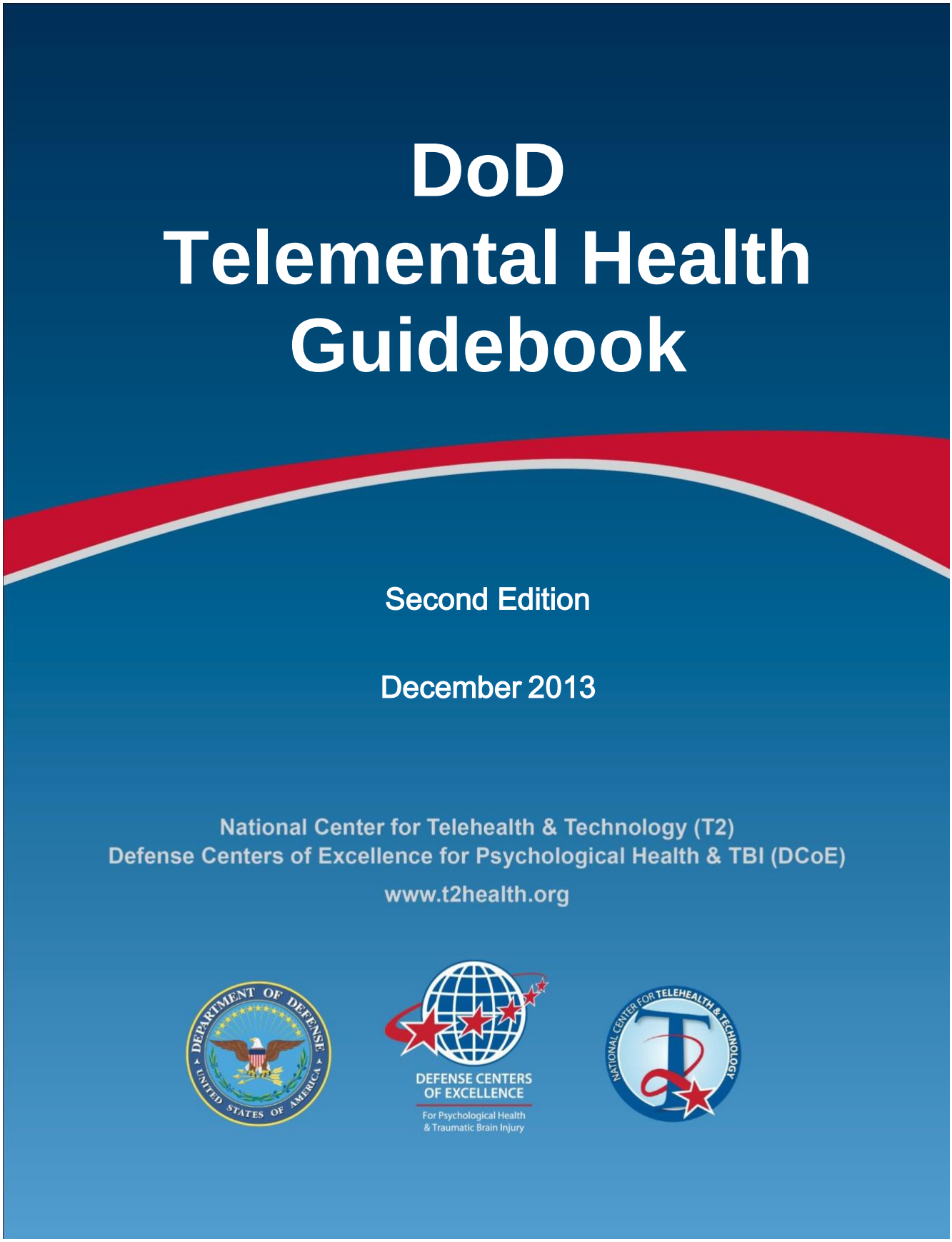
The TUQ has strong content validity because it incorporates items from the best current measures in telehealth, which have withstood the scrutiny of rigorous prior validation studies, and it has been used in previous studies conducted by several of these authors. The TUQ's reliability, specifically internal consistency, is more than adequate. Its internal consistency was evaluated directly as a part of this investigation. The first step in the reliability examination was to develop a protocol to vary the TUQ's standard language when administered orally to a targeted respondent group to ensure optimal understanding. Secondly, a "systems check" was performed by administering the TUQ using various telecommunication systems to ensure its operational integrity and quality when used in various technology contexts. Finally, we tested the TUQ's internal consistency using Cronbach's coefficient alpha. It performed remarkably well, with alpha values that substantially exceeded the acceptable range in all domains: usefulness, ease of use, effectiveness, reliability, and satisfaction. Additionally, the associated eigenvalues, factor loadings, and percentages of variation explained by each domain were strong.

Our development efforts and the analyses implicit in those efforts have revealed that the TUQ is a solid, robust, and versatile measure. It is based on the best usability questionnaires available, able to respond to the latest technology changes in telehealth, incorporates both client and clinician interface needs in the delivery of clinical services via telehealth, and addresses all of the relevant dimensions of usability. Its prognosis is strong; more widespread use in telehealth studies going forward will be the ultimate test of its effectiveness. Given the increase in pervasiveness of telehealth in the delivery of clinical services from a distance, along with the rise in use of computer-based systems that rely on software and a computer interface as the model of delivering telehealth, the TUQ will be valuable for measuring usability.

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Appendix E: DoD Telemental Health Guidebook (17)



OVERVIEW

The Department of Defense (DoD) Task Force on Mental Health, established by Section 723 of the National Defense Authorization Act (NDAA) for Fiscal Year 2006, delivered a report of its findings on June 12, 2007. This report contained ninety five (95) recommendations including a strong, positive vision calling for a cultural change to improve and enhance the psychological health and fitness of all Active and Reserve component Service Members and their families. The DoD embraced the vision and the spirit embodied in the recommendations and developed a plan of action to address these 95 Task Force recommendations. This included the establishment of the Defense Centers of Excellence (DCoE) for Psychological Health (PH) and Traumatic Brain Injury (TBI) on November 30, 2007.

The National Center for Telehealth and Technology (T2) is a component center of DCoE and is the Military Health System (MHS) lead office for telemental health and related telehealth services. T2 is a dynamic technology organization with the mission to lead the innovation of health technology solutions by delivering tested, valued solutions that improve the lives of our Nation's Warriors, Veterans, and their Families. T2 is aligned with DCoE's goal of establishing best practices and quality standards for the treatment of PH and TBI, while working to eradicate the stigma that sometimes deters people in the military community from seeking help for treatable conditions.

Members of T2's Telehealth Program (THP) staff developed this guidebook to provide high-level guidance to the MHS telehealth community. THP serves as an enterprise leader in enhancing telehealth clinical quality, competencies, and best practices across the DoD. A draft of this guidebook was originally completed in 2011 and the current updates are provided to assist with implementation of the telehealth strategic plan referenced above. The previous version of the guidebook was used for several important initiatives including development of in-person Introduction to Telemental Health (TMH) trainings. One training was a tri-Service workshop designed to provide an overview of the basic clinical, technical, administrative, and regulatory knowledge needed for DoD providers and provider organizations to engage in TMH practice or develop TMH organizational components. The second training was a Pre-Deployment TMH Delivery course delivered to the 1972nd Combat Operational Stress Control (COSC) unit. This course built on the foundational knowledge delivered in the first course and in addition specially focused on providing the hands-on skills necessary to deliver TMH services in-theater. Both trainings included hands-on practice using telehealth equipment in mock clinical and technical emergency situations.

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1. INTRODUCTION

1.1 Reason for Developing this Guidebook

Long duration engagements, multiple theaters of operation and serial deployments have presented unparalleled challenges in meeting the psychological health needs of Service Members for the military, veteran, and private sector health care delivery systems. The DoD is engaged in identifying solutions that will further enable the use of technology to deliver quality psychological health care services to all beneficiaries within the Military Health System (MHS). The DoD has determined that telehealth is one such solution to meeting this critical need.

Information continues to accumulate regarding how best to deliver psychological health care through telehealth. The National Center for Telehealth & Technology (T2) was created in large part to help guide DoD's development of a functional and sustainable telehealth system. Pursuant to that mission, T2 created the first version of this guidebook in 2011 to consolidate much of the existing telemental health (TMH) information in one reference source for easier access by all Service programs and providers. It remains T2's role as a DoD telehealth enterprise leader to continue to promote TMH competencies and best practice information. This 2nd edition of the guidebook was created as part of T2's directive to help ensure that all involved in the MHS TMH system of care continue to have access to current TMH resources and information.

1.2 Definitions

There are many definitions of telehealth. According to the U.S. Department of Health and Human Services Health Resources and Services Administration, telehealth is defined as "the use of electronic information and telecommunication technologies to support long-distance clinical health care, patient and professional health-related education, public health and health administration." [1] U.S. Army Medical Command Tele-Behavioral Health Operations Manual defines telehealth as "a capability encompassing the policies, processes, organization, products, systems, and services that support the delivery of healthcare at a distance via electronic communications."[2]

Telehealth is not a clinical service itself, but rather a mode of service used to connect patients or providers located in one location with providers in a distant location. Telehealth encompasses both the people using the technology (health care patients and providers) and the telecommunications technology and equipment used to link the people.

Telehealth is sometimes used interchangeably with other terms, such as telemedicine and eHealth, but telehealth is a broad term that covers all forms of providing health care services at a distance, including non-clinical services. eHealth is commonly referred to using the internet to provide service, though some define it more broadly. The DoD Glossary of Healthcare Terminology (1999) defines telemedicine as "An umbrella term that encompasses various technologies as part of a coherent health service information

resource management program. Telemedicine is the capture, display, storage and retrieval of medical images and data towards the creation of a computerized patient record and managed care." [3] According to the American Telemedicine Association (ATA), telemedicine is defined as "the use of medical information exchanged from one site to another via electronic communications to improve patients' health status." [4] Telemedicine includes the provision of physician-based services and is used in a wide range of specialty services, most notably radiology, dermatology, rehabilitation, psychiatry, and many other health care specialties.

Telemental health is a subset of telehealth that uses communication networks to provide mental health services. The ATA *Practice Guidelines for Videoconferencing-Based Telemental Health* define it as follows: "Telemental health, like telemedicine, is an intentionally broad term referring to the provision of mental health and substance abuse services from a distance." [5] Within DoD, this includes services for any psychological health concern or traumatic brain injury. Telemental health includes telepsychology, telepsychiatry, and tele-behavioral health.[*] Throughout this guidebook the acronym "TMH" designates telemental health.

1.3 Benefits of Telemental Health

TMH is a rapidly growing mode of health care service delivery that offers a viable solution to improve access to high quality care without geographic limit. It can overcome provider shortages, increase access to specialty providers, reduce health care costs, and better serve the many rural and geographically remote communities where Service Members may live. Within the DoD, TMH can increase access to services in areas that have limited direct care and/or TRICARE network capacity, assist in the management of high volume "surge support", facilitate continuity of care, and reduce stigma by allowing the patient to receive care in a more convenient location. When used in deployed and other operational settings, TMH can extend the reach of care providers to forward and remote locations without incurring significant risk due to travel, and it can mitigate against lost patient encounters due to travel difficulties (e.g., being stranded in one location for a long time).

The breadth of the qualitative and quantitative research to date has resulted in a sufficient empirical base to consider and develop industry standards and best practices. The Telemental Health Special Interest Group of the American Telemedicine Association (ATA) formed a group of experts in the field who reviewed thousands of published articles and eventually published a document titled, *Evidence-Based Practice for Telemental Health*. [6] That document covers a review of the empirical base for telemental health care in various categories, including type of setting (e.g., inpatient vs. outpatient), type of care (e.g., interview, psychological assessment, individual and group therapy), and population type. Readers are referred to that document and additional recent review articles[7, 8] to see a fuller description of the empirical support that exists for each specific area of care. The empirical base continues to grow, become more sophisticated, and

[*] The Department of the Army no longer uses the term mental health. The Army now uses the term behavioral health

establish more consistent findings. To date, the bulk of the evidence base indicates that TMH is a useful and effective mode of health care delivery. As a result, many federal agencies, including the U.S. military and the Veteran's Health Administration consider TMH a legitimate and accepted mode of care and are continuing to expand its use.

1.4 Purpose and Goals

This guidebook was developed to serve as a DoD education resource and reference to complement the continued expansion of TMH services within the DoD. Its primary purpose is to provide key organizational, system, technical, and clinical information useful for DoD programs and providers to effectively employ TMH services regardless of time, need, or location (e.g., CONUS, OCONUS, shipboard, deployed, combat zone, operational, and non-operational). The TMH Guidebook provides information on the applications and practical uses of telemental health, information useful for establishing a telemental health program, technology requirements, and clinical practice information for conducting a telemental health session.

The guidebook provides information to clinical providers, program administrators, technical staff, and anyone else involved in the delivery of TMH services. The information in this guidebook is provided to enhance TMH service delivery to programs and providers whether they have delivered TMH services for some time, are just starting to deliver TMH services, or are thinking about implementing or delivering TMH services. Overall, this guidebook's goal is to further enhance the development and delivery of TMH within the DoD by providing information that is useful for creating successful and sustainable TMH programs. Though the focus of the guidebook is on TMH, much of the information here is relevant to the broader field of telehealth.

1.5 Scope

This document provides a broad overview of telemental health that is useful across the DoD. As the Services' medical departments and individual TRICARE providers or contractors may have their own standard operating procedures and guidelines, this document is not meant to supplant any existing concepts of operations or standard operating procedures, but is meant as an additional resource. Thus, this guidebook is not meant to provide a "cookie cutter" approach to TMH delivery, but rather to address the basic common issues to consider when providing TMH services. Many requirements of TMH are unique to specific situations and individual Services or providers, resulting in local procedures and guidelines. It is important to regard this guidebook as a source of general telemental health information rather than dictating specific solutions.

This guidebook does not establish standards, guidelines, or policies for the practice of telemental health. Service providers are advised to follow any existing practice guidelines from their respective professional organization (e.g., the American Psychiatric Association, American Psychological Association, and National Association of Social Workers). In addition, this guidebook does not supplant any guidelines from the American Telemedicine Association (ATA). Though we rely on established ATA

guidelines for some of the material in this guidebook, readers should read the full text of those guidelines for any specific information or recommendations.

The focus of the guidebook is the delivery of telemental health services via live two-way video teleconferencing. Nothing is the guidebook is meant to specifically address service delivery via other technologies (e.g., Internet, store and forward, remote monitoring).

This document should be treated as an ever-evolving guide that provides direction for the implementation of TMH services. It is anticipated that lessons learned along the way will expand and refine the knowledge base, and that this document may be revised as appropriate. We welcome feedback or suggestions for possible inclusion in future revisions.

2. APPLICATIONS FOR THE PRACTICE OF TELEMENTAL HEALTH

2.1 Delivery Mechanisms

There are two main categories of communication delivery - synchronous and asynchronous. Synchronous communication encompasses live, real-time interactive two-way communication. Asynchronous communication, often referred to as "store and forward," is when medical images or other medical information data is collected (e.g. medical x-rays, dermatology lesion photographs) and sent to a provider via electronic communication (e.g., email). This is often used when the provider does not need to interact directly with the patient. Consultation is one commonly used form of asynchronous service. This occurs when one provider transmits medical information and associated images over a secure site to another provider to obtain specialty support or expert opinion regarding the care of the patient. The consultant provider can make recommendations back to the original provider for their review at a later time. Within the DoD, Pacific Asynchronous TeleHealth (PATH) System is an example of an asynchronous telehealth service that provides specialty teleconsultation between Tripler Army Medical Center and Western Pacific Military Treatment Facilities.[9, 10] Project ECHO® (Extension for Community Healthcare Outcomes) is another well-known telehealth consultation model that aims to bring specialist care to rural and underserved areas. [11] DoD Service branches are actively involved in incorporating Project ECHO models. For example, US Air Force currently maintains ECHO networks for Complicated Diabetes, Traumatic Brain Injury (TBI), Chronic Pain Management, and Behavioral Health, with two others (International Medical Readiness and Dermatology) in development for fiscal year (FY) 2013.

This guidebook focuses specifically on video teleconferencing (VTC), a form of synchronous delivery. VTC, as in other forms of live two-way interactive telecommunication is used when a provider must interact directly with a patient over a distance. VTC allows live interaction to happen in real time between multiple parties. This can include interaction between providers, between provider and patient, between provider and family member, and other interactive encounters.

Other delivery mechanisms include web-based and remote monitoring. Web-based delivery can include web chat, email exchange, Internet therapy, and patient or provider education. Remote monitoring is another form of delivery. This form is most commonly used to monitor vital signs such as heart rate, blood pressure, pulse, oxygen saturation levels, and blood glucose for chronic medical conditions such as diabetes and hypertension. A connection is generally formed between a provider or provider center and a patient at another site that can include a nursing care center or increasingly more common, the patient's home.

2.2 Clinical Applications

Telemental health is being used as a mode of service delivery in a wide range of settings, including outpatient clinics, hospitals, correctional facilities, private practitioner offices, schools, nursing homes, and even patient homes. The clinical uses of telemental health are as wide-ranging as those used in face-to-face care. Telemental health clinical applications can include the following (this list provides some common examples and is not fully inclusive):

- clinical interviews for mental status, initial evaluation, diagnostic formulation, and forensic evaluation;
- various treatment modalities, such as individual therapy, group therapy, family therapy, marital therapy, medication management, and psycho-
- psychological and neuropsychological testing;
- Soldier Readiness Processing (SRP) evaluations;
- case management to enable multiple providers and multi-disciplinary teams to coordinate care and collaborate with each other, with the patient, and with the patient's family;
- clinical consultation with other professionals; and
- clinical supervision of professionals or trainees (e.g., residents, fellows, or interns).

2.3 Non-Clinical Applications

Telemental health also offers useful non-clinical applications that allow health care providers to accomplish a variety of tasks without having to travel.

Administration – VTC technology provides an effective means of allowing interactive audio-visual communication meetings and other administrative support between service centers. This can bring multiple staff together more efficiently, while reducing the time, cost, and effort associated with traveling from one site to another.

Distance Learning – VTC allows providers a range of educational opportunities that are often easier to access than through traditional methods. VTC allows providers to learn new practices and techniques in their respective fields, obtain additional professional training through mentoring with providers at different locations, and complete required clinical continuing education credits. Distance education is also useful for providing

patient education, such as teaching patients about medications and assessing compliance with individual treatment plans.

Research – VTC allows research teams at geographically separate locations to communicate in real time, exchange data, and interview subjects regardless of distance.

3. TELEMENTAL HEALTH TECHNOLOGY AND EQUIPMENT

3.1 Video Teleconferencing (VTC) Technical Specifications

Video teleconferencing (VTC) technology and equipment varies by capability and cost. The key characteristic of any VTC technology used for telemental health is that it supports patient care from a distance. To do that, the equipment and technologies used for TMH should allow providers to see and talk with patients, review electronic patient records, and respond quickly and appropriately to emergencies should technical or clinical emergency issues arise. The technology should also ensure patient privacy and security, consistent with applicable DoD regulations[12, 13] and the Health Insurance Portability and Accountability Act (HIPAA).

There are a wide range of features that are available with VTC technology (e.g., recording capabilities; a camera that can pan, tilt, and zoom; picture-in-picture functionality to simultaneously view both the patient's and one's own image that is being projected to the patient). Organizations and individuals should consider which features are most suitable for their operations given costs and needs. DoD organizations should comply with any requirements for using approved equipment that exist (e.g., Joint Interoperability Test Command). In addition, TRICARE Policy Manual 6010.57-M[14] indicates that providers of TMH services "shall have video technology components meeting or exceeding" American Telemedicine Association (ATA) standards. It is advisable that organizations review the ATA's technical specifications in their 2009 *Practice Guidelines for Videoconferencing-Based Telemental Health*[5], as well as review their own internal policies and procedures when deciding on what VTC technology to use for TMH. This guide will provide a brief overview of some of the basic technology and equipment commonly used in TMH via VTC.

3.2 Installation and Connectivity

Most VTC communication occurs utilizing an internet connection via the principal communications protocol, or Internet Protocol (IP). There are other forms of secondary connection types: integrated services digital network (ISDN), plain old telephone systems (POTS), and Digital Subscriber Lines (DSL). Satellite and cellular communications are sometimes used in remote areas. Connections can occur between two points or between more than two points simultaneously. The ability for both patient and provider to see and hear accurately and effectively is obviously essential for both to properly perceive the exchange of speech as well as more subtle visual and audible cues.

Bandwidth, measured in bits per second (bps) is the rate of data transfer that occurs during any connection. Operating at a minimum bandwidth of 384 Kbps or higher is suggested when conducting telemental health services, due to research showing noticeable differences in perception when using lower bandwidths. Cost and individual circumstances may necessitate the use of lower bandwidths when providing services to remote locations that do not have higher bandwidth capabilities. The TRICARE Policy Manual lists a requirement of "a minimum bandwidth of 384 kbps (H.263), 256 kbps

(H.264), or technical equivalent."[14] Regardless of the connection method the American Telemedicine Association *Practice Guidelines for Videoconferencing-Based Telemental Health* recommends adequate transmission speed to ensure "…the smooth and natural communication pace necessary for clinical encounters."[5] Ultimately, providers should feel comfortable that the bandwidth is sufficient to transmit information well enough to allow them to make accurate clinical decisions.

Internet Protocol (IP) uses the internet as a means of communicating data. It can transmit over T1 lines, DSL, cable, and can use a local area network (LAN) or a wide area network (WAN). IP is often a less expensive alternative to ISDN, and typically provides better security and more reliable transmission than ISDN. Policy and local information technology requirements may dictate the choices available to specific DoD agencies.

Integrated Services Digital Network (ISDN) is a digital phone line that allows for the simultaneous transmission of voice, video, data, and other network services. It has two types: Basic Rate Interface (BRI) and Primary Rate Interface (PRI). PRI can support multiple site transmissions and uses a higher bit rate. For most TMH encounters between patient and provider, BRI is sufficient. ISDN often aggregates multiple individual phone lines into a single bandwidth connection, lowering the bandwidth of each transmission. Therefore, when using ISDN for telemental health, it is recommended that a sufficient number of phone lines are used to ensure transmission of at least 384 Kbps. Three phone lines are generally required to get to 384 Kbps because a standard BRI connection is 128 Kbps per line.

Hardware – There are a variety of VTC systems on the market. Cisco/Tandberg, Polycom, and LifeSize are among the most widely available brands. We make no specific recommendation, and recognize that individual component services or agencies may have specific recommendations based on local needs and preferences.

It is also possible to use an existing laptop or desktop as the foundation of a simple VTC system suitable for many TMH encounters by simply adding a USB webcam and a USB desktop microphone to the computer. Be aware that not all USB webcams are approved for use on DoD computer systems; check with your system administrator for approved devices and uses to ensure that computer systems and software comply with facility, state, and federal regulations. Cisco Jabber Video (formerly Movi) is one commonly used desktop VTC system. Since 2010, U.S. Service Members have used laptops to provide TMH throughout Afghanistan.

3.3 Image Storage, Retrieval, and Transmission

It is essential to ensure that any transmission of information over electronic means in the United States complies with the Health Insurance Portability Accountability Act (HIPAA) of 1996 (Public Law 104-191).[15] When transmission of identifiable patient data occurs, as when one transfers patient records or forms, it should occur over secure networks or use appropriate encryption protocols. Additional sources can provide a fuller discussion of HIPAA and how it relates generally to TMH security and privacy

considerations.[16, 17] If TMH is to take place internationally, the provider and/or organization providing the service should also ensure that the privacy laws of that country are understood and followed.

It is recommended to notify patients of all personnel who will see the patient's image during the VTC encounter and to let them know that the encounter transmission is secure and not being recorded, if that is the case. Should the provider wish to videotape an encounter, they should first obtain the written consent of the patient using the appropriate forms. Consent should include making the patient aware of how their recorded encounter will be used, stored, and discarded. If encounters are recorded, the facility or individual recording the encounters should have appropriate procedures in place to secure the video, consistent with HIPAA regulations.

3.4 Equipment

It is recommended that anyone providing TMH via VTC have the following equipment to ensure safe and effective practice. Note: The following includes the equipment commonly used today. The DoD is working on projects to expand the types of equipment used beyond the norm. As technology and policy progress, it is expected that additional equipment (e.g., handheld devices, sound booths) will become increasingly accepted and used in TMH.

Monitor – The patient site should have a monitor large enough to make the clinician appear more life-like to the patient. Smaller units may force the patient to gaze downward, making it more difficult to interpret a patient's facial expression.

Providers can use desktop, laptop, or room-based systems. The TRICARE Policy Manual requires providers to have a monitor with a "minimum net display of 16 inches diagonally."[14] Using a desktop or smaller unit may make it difficult for the provider to see small patient details and the full range of patient body movements. The provider's monitor should be large enough to see sufficient detail necessary for the provider to make clinical decisions necessary for that particular encounter. If conducting group therapy via VTC, larger monitor VTC configurations can better ensure a quality group environment.

Equipping the provider site with more than one monitor may be clinically useful for a TMH encounter. It is helpful to ensure that providers can see their own image during an encounter to ensure that all equipment is working properly. Providers may also wish to view medical records during or just prior to the encounter. Using two or more monitors, a picture-in-picture configuration, or a combination of the two can ensure these capabilities. Note that using an additional monitor may prove less distracting for the provider than having to toggle back and forth between medical records and the patient's on-screen image.

Video Cameras – Cameras at both the patient and provider sites should be of sufficient resolution to capture detailed images. Any camera designated high definition (HD) should provide acceptable resolution. The TRICARE Policy Manual requires a minimum video resolution of "one Common Intermediate Format (CIF), or one Source Input

Format (SIF)." [14] Some have suggested that the provider's camera should have flexibility to allow viewing of patient movement. Cameras with pan, tilt, and zoom capabilities may help with some clinical encounters, and are required for originating sites with more than 50 visits per calendar year under current TRICARE policy.[18] Within current policy, the provider can best determine which specific camera functions are essential for a specific encounter.

Microphones - High quality microphones and speakers are also recommended to ensure effective communication. It is important to consider the microphone placement so that speech is captured accurately. Most flat "conference style" microphones are suitable when placed on a hard, flat surface at desk level, or on a flat wall at about head level when seated.

Internet Connectivity – Both the patient and provider site should have reliable internet access. Both sites will likely want access to internet and intranet to share patient information (e.g., records, consent forms) and to access necessary resources such as psycho-educational material and contacts/referral information. The provider will also likely need access to the clinical record system (e.g., AHLTA) used to read and make appropriate and timely notes of the encounter.

Telephone – For safe and effective operations, telephone communication between the provider and patient sites is essential. A telephone is needed to provide an alternate means of communication should technical difficulties arise; both to contact technical support and to reconnect patient and provider site should a loss of video communication occur. Landline telephones are ideal as they are generally most reliable; however, cellular or satellite telephones can also serve as effective backups.

Fax or Scanner – It is helpful to have faxing, scanning, or digital sending capability between the patient and provider site as a means of exchanging printed information. This enables the provider site to efficiently transmit any patient material filled out at their end, such as consent forms, clinical questionnaires, and surveys into the medical record.

3.5 Technical Troubleshooting

It is essential for the safe and effective operation of TMH services that adequate Information Technology (IT)/technical support is available to ensure smooth operation of equipment and to promptly provide technical troubleshooting support should communication disruptions occur. Ongoing IT or technical support can ensure that technical operations are optimized to create the best clinical experience given the equipment being used. Both the provider and patient sites should have standard operating procedures or plans in place to manage technical issues that may arise when conducting TMH via VTC. It is helpful to have designated IT or technical support personnel ready to provide a rapid response for equipment problems that might occur during an encounter. Given the clinical needs that may arise during an encounter should equipment become inoperable, it is essential that clinical contingency plans are also in place to support patients during technical difficulties that may delay or terminate the encounter prematurely. A telephone should allow the provider to talk to the patient and/or the staff

on site with the patient in case of telecommunications failure. Having ongoing collaboration with knowledgeable IT staff will help ensure efficient clinical operations. Clinicians should also have basic technical operational knowledge as clinicians can resolve many issues themselves through basic troubleshooting (see Appendix A for an example of a basic troubleshooting checklist for clinicians).

4. ESTABLISHING A TELEMENTAL HEALTH PROGRAM

4.1 Organizational Structure and Administrative Procedures

There are a number of organizational and administrative factors to consider before implementing TMH services. Consideration of these factors should allow the service to operate more efficiently and may avoid common mistakes. This section is mostly focused on organizations that wish to deliver TMH services, but any individual provider could also benefit from the information in this section. This is not meant as a comprehensive guide to starting a TMH practice, but is meant to provide an overview of some of the programmatic issues relevant to providing efficient TMH services.

4.1.1 Needs Assessment

At the organizational or clinic level, it is recommended to conduct a needs assessment as the first step in strategic planning. This is an important step necessary for designing, implementing, and sustaining TMH services. It can help organizations or individuals determine the demand for services and define the specific types of services to offer, and to what types of populations. An assessment of the localized needs of the area where the services will be offered will best gain buy-in from leadership at the local agency or organization. A local TMH clinical "champion" is also recommended to achieve and maintain buy-in. Also, the more clearly defined the goals of the TMH services to be provided, the easier it will be to later measure whether the services are meeting those goals.

In addition to a clear strategic plan, those offering TMH services should consider – at a minimum – the organizational structure; the personnel needed at both the patient site and the provider site; the roles of those personnel; the space, equipment, and technology needed to provide and support services; and how the clinic can ensure that proper procedures for documentation, staffing credentials and competencies, and patient privacy are followed. A thorough needs assessment will match the clinical needs with the best available technology and equipment necessary to achieve those clinical needs. Appendix B provides an example of some preliminary needs assessment topics and questions to cover when initiating a formal needs assessment process.

4.1.2 Development of a Standard Operating Procedure

Another recommended early step to ensure the safe and efficient delivery of TMH services is to put standard operating procedures (SOPs) in place prior to administering care. SOPs can ensure consistent implementation of TMH program functions. SOPs should cover all functions and responsibilities of a TMH program, and should incorporate higher level procedures, as well as local organizational goals and policies. Some of the Services, and programs within the Services, have already developed draft and working SOPs that are in various stages of development; check with your respective Service for specifics. Of particular note, U.S. Army Medical Command finalized a Tele-Behavioral Health Operations Manual in 2012.[2] U.S. Army Regional Medical Commands, as well as U.S. Navy and Air Force also have either established SOPs or are working on them. Please check with the Service lead or medical facility/department for most current drafts.

4.2 Staffing and Personnel Roles

There are several staffing issues to consider when providing TMH services. Having knowledgeable staff dedicated to delivering TMH services will help ensure smooth operations and sustainability. Adequate staffing and clearly defined personnel roles are also important for the safe operation of any TMH service. The site where the patient is located is referred to as the originating site. The site where the provider is located is referred to as the distant site.

4.2.1 Staff Roles and Responsibilities

Distant/Provider Site

The main staff needed at the distant site are the telemental health providers who will deliver the clinical services. This can include any type of mental or behavioral health provider who normally provides face-to-face clinical care, and possesses adequate knowledge and/or training on the unique aspects of delivering services through videoconferencing. Although the main role of the distant site provider is to deliver care, other responsibilities of the distant site staff include the following:

- familiarity and comfort with the technology;
- appropriate technology knowledge and/or support to handle basic documentation and technical troubleshooting on their end;
- knowledge of appropriate patient site procedures to follow in case of clinical or medical emergency;
- screening patient for appropriateness for TMH care; and
- collaboration with the originating site on follow-up and other aspects of patient care.

Originating/Patient Site

It is essential to have appropriate staff at the patient site to ensure the most effective and efficient telemental health encounter. There are various titles for roles at the originating site, including clinic coordinator, administrator, technician, tele-presenter, medic, corpsmen, clerk, escort, and others. The actual titles at the originating site may vary based on local organizational policies or preferences. More important than the titles is ensuring that the following general responsibilities are covered at the originating site:

- familiarity and comfort with the technology sufficient to establish the VTC connection and perform basic first line troubleshooting;
- knowledge of common issues that might suggest that TMH care is not appropriate for a particular patient at a particular time based on their presentation at the site;
- ability to serve as main point of contact to provide and initiate appropriate patient site procedures should any technical difficulties or clinical/medical emergencies arise during the encounter; and
- administrative responsibility to ensure overall effective clinical operation.

In addition, it is generally the role of staff at the originating site to perform the following more specific functions:

- Coordinate completion of any clinical forms with the patient, and coordinate electronic retrieval and transfer of necessary records or documentation to the provider delivering the service prior to the visit;
- Orient patients new to TMH on the nature of a TMH encounter, obtain informed consent, and answer any questions about the service (though the distant provider may also take this role);
- Assess for any overt signs that would suggest TMH may not be appropriate for this patient and communicate any concerns to the responsible provider;
- Ensure that the equipment is turned on and working properly before the TMH encounter;
- Escort the patient to the room for the TMH encounter and remain to present the patient or handle any other issues as deemed necessary by the provider delivering the TMH service;
- Remain available during the encounter as a point of contact in case any clinical or medical emergency protocols are initiated; and
- Handle other necessary end of visit documentation that may include arranging following-up scheduling, completion of satisfaction forms, or serving any other immediate needs the patient may have at the completion of the encounter to help ensure coordination and continuation of care.

4.2.2 Coordination Between Originating and Distant Sites

When both sites are involved in providing ongoing services to patients, it is important that there are established procedures for coordination between the originating and distant site staff. For immediate needs, the sites should have reliable computer and telephone communications in place to handle simple care coordination, such as transfer of records and emergencies. Sites should also consider regular contact (possibly over VTC) to monitor overall quality of care and address areas for improvement, as both sites play a role in ensuring that patients receive the best overall care.

4.2.3 Information Technology (IT)/Technical Support

Telemental health requires adequate technical support. Policies should be in place to address how technical support will be provided and by whom. These policies should address technical support at the originating site as well as the distant site. It is recommended that development of these policies include the information technology department.

4.2.4 Licensing, Credentialing, and Privileging of Providers

Licensure

Telemental health often facilitates care across state lines. Because there is no national or specialized telemental health licensure at this time, the normal licensing regulations that apply to each health care specialty remain in force. Professional licenses are granted by individual states and licensure laws generally require providers who are delivering care across state lines to have a license both where the provider is located and where the patient receiving the care is located. There are specific *telemedicine* laws in some states that vary in how they define the parameters of the type of care that can be provided across state lines, and in what circumstances.

There are, however, specific statutory provisions and policies that govern the ability of certain DoD providers and providers of other federal agencies to deliver clinical care anywhere, including across state lines as long as they are licensed in one state and other requirements are met (sometimes known as "portability of licensure"). Licensure exceptions for Department of Defense health care professionals are contained in 10 U.S.C. 1094(d)[19] and incorporated into policy in DoD 6025.13-R.[20] Section 713 of the 2012 NDAA amended 10 U.S.C. 1094(d) by expanding the categories of health care providers covered and by including language that expands the locations where covered care can occur.[21] Section 713 of the 2012 NDAA expanded the categories of covered health care providers from just "member of the armed forces" to include "…member of the armed forces, civilian employee of the Department of Defense, personal services contractor under section 1091 of this title, or other health-care professional credentialed and privileged at a Federal health care institution or location specially designated by the Secretary for this purpose.'' Section 713 of the 2012 NDAA amended 10 U.S.C. 1094(d) to expand the location and reach of where health care professionals covered under this statute can provide care to include "at any location in any State regardless of where such health-care professional or the patient are located, so long as the practice is within the scope of the authorized Federal duties." The previous version did not include the phrase "at any location."

Although the recent legislative changes have not yet been incorporated into DoD 6025.13-R, the Assistant Secretary of Defense (Health Affairs) signed a "waiver" in December 2012 to incorporate aspects of Section 713 of the 2012 NDAA until such time that DoD 6025.13.-R is modified, revoked, or reissued.[22] That document waives the requirement that a telemedicine provider must have a local license in order to carry out official duties and grants portability of licensure to not only members of the Armed Forces, but also to:

1. "The health care provider must be a civilian employee of DoD, personal services contractor, a member of a non-DoD Uniformed Service assigned to DoD, a civilian employee of Veteran Affairs (VA), or a member of the National Guard performing training or duty under section 502(f) of Title 32 in response to an actual or potential disaster. This waiver does not cover non-personal services contractor personnel."[22]

The entire waiver is included in Appendix C for further information. When providing telemental health services, it is ultimately the responsibility of the provider to ensure that all applicable licensure laws and regulations are followed. For additional guidance, DoD providers can check with local command and review any Service specific policy memos on the issue since the Services may be in the process of updating licensure policies and procedures as a result of NDAA 2012 and the waiver. Of particular relevance, Department of the Army issued OTSG/MEDCOM Policy Memo 13-009, 20 Feb 2013, Use of Telehealth in the United States Army Medical Command (MEDCOM).[23]

Credentialing and Privileging
In a hospital setting, providers usually must establish credentials and privileges to practice at medical facilities. This is typically done at the local Military Treatment Facility (MTF) or regional "hub" where the provider delivers care. Providers who deliver telemental health services will likely need credentials and privileges at both the originating site and the distant site where the patient is located. Exceptions may exist for purely consultative services, but providers should check with their respective Service and local MTF policies. Unfortunately, there is currently no national credentialing or privileging agency for DoD providers. The Centralized Credentials Quality Assurance System (CCQAS) facilitates DoD credentialing, pursuant to DoD regulation 6025.13-R. [20] An Inter-facility Credential Transfer Brief (ICTB) can facilitate credentialing and privileging at one site if the DoD provider is already credentialed and privileged through DoD at another site.

On a national level, the Centers for Medicare & Medicaid Services recently issued a rule for credentialing and privileging that might ease the process to some degree.[24] The new rule allows a facility whose patients are receiving telemedicine care to rely on the credentialing and privileging information for the distant site provider under certain conditions. In addition, the ASD(HA) "waiver" discussed in the licensure section above or Appendix C – incorporates aspects of the new CMS rule into DoD policy for telemedicine providers until such time that DoD 6025.13-R is modified, revoked, or reissued. It is worth becoming familiar with this rule and the DoD waiver, as it might allow opportunities for improved credentialing and privileging policies and procedures for TMH. Implementing the new procedures often known as "privileging by proxy" will most likely require a Memorandum of Understanding/Agreement between two sites. Also, the Accreditation Association for Ambulatory Health Care (AAAHC) has provided written notification of concurrence with these standards (Appendix D). It lists criteria to follow that are similar to the CMS criteria for "privileging by proxy."

4.3 Room Design and Set Up

4.3.1 Space Requirements

The amount of space needed to install, operate, and secure VTC equipment can vary greatly, due to specific technical requirements and types of treatment offered. Careful advance space planning can ensure efficient operation, reduce installation time, and help control costs. Consultation with technical staff about network connectivity issues and power requirements are vital. Some spaces may require modification to house and run the equipment optimally. In addition, a secure space is recommended to prevent tampering or unauthorized use of the equipment.

Clearly, sufficient space is needed to accommodate the patient and the provider comfortably in their respective rooms. The physical and emotional comfort of the patient is paramount, and the physical environment should convey a clinical environment. Particularly within the DoD, where many Service Members have experienced trauma, it is recommended that any TMH space have sufficient size to prevent the patient from feeling closed in, trapped, or claustrophobic. The space should be large enough for the patient to feel comfortable during the encounter, and possibly to

allow the patient to demonstrate mobility if that is relevant to the examination. Ultimately, the space chosen should accommodate the type of TMH service being offered. Services that may require larger spaces include group and family therapy; assessment or testing requiring use of a table; and for child services where children would benefit from use of a play table.

4.3.2 Room Environment

The physical environments at both the originating and distant site are clinical environments and the spaces should reflect that. The location of the room for the encounter at both ends should ensure comfort, privacy, and confidentiality. Both visual and audio privacy are important, and placement and selection of the rooms should consider this. Windows, if present, should have blinds to protect privacy and to control for sunlight which could cause a glare.

4.3.3 Room Set Up and Equipment Issues

Lighting

Proper lighting is important for TMH delivered via VTC. This includes choice of lighting and placement of lighting sources. The most important considerations are that the room is well lit and the lighting in the room is placed in a way that avoids casting shadows on the faces of the participants. It is also best to avoid mixing light sources. Fluorescent light especially that which creates soft or diffuse (i.e., non-directional) light is considered a better choice than directional light that might create a spotlight effect.

Whatever type of lighting is selected, the room should be evenly lit to minimize shadows and to maximize the appearance of natural skin tones. Direct overhead lighting can cast shadows making facial expressions difficult to read. Lighting placed directly in front of people can make them appear pale, while lighting directly behind people can darken their appearance (see examples below). Experimenting with the placement of the room lighting can help result in the ideal placement for the best viewing quality. Lighting may also need to be adjusted for different individuals. If shadows fall on the patient's face or the patient projects too dark a skin tone, the provider may have difficulty reading facial expressions and subtle hand movements that might provide meaningful clinical data.



Example 1: Inadequate Lighting



Example 2: Uneven Lighting



Example 3: Excessive Direct Lighting



Example 4: Appropriate Lighting

Backdrop/Wall Color

The color of the wall and the background of the room can also influence the picture quality, and thus the quality of the TMH encounter. The best wall color is neutral, solid, and one that does not produce glare by reflecting light. Blue, particularly light blue, is considered optimal; light grey and beige may also work well. White and black backdrops are not recommended as they make the individual appear too light or dark (see examples below). It is also best to keep the area within camera view of the patient and provider clean and without distractions such as excessive files, posters, pictures, bookshelves, etc. Clutter and too many visual distractions, particularly items with patterns, can impair the picture quality of the VTC experience. It is better to place such items behind the camera in a manner that does not allow the viewer on the other end to see them during the VTC transmission.



Example 5: White Background



Example 6: Black Background



Example 7: Light Blue Background (RECOMMENDED)

Acoustics/Sound
Audio quality is generally considered more important than video quality in creating a favorable VTC experience.

The audio should be loud enough at each end so that both the patient and provider can be easily heard, but not so loud that the TMH session can be overheard by people outside passing by the room, or in adjacent rooms. Keep in mind that people often speak louder when using VTC, and speakers tend to project more sound than the voice does in face-to-face sessions. A quiet room, located away from busy hallways and reception areas with lots of noisy office equipment and congregating patients is ideal. It may help to provide additional soundproofing material on floors, ceilings, and walls to reduce unwanted sound transmission and assure patient privacy. Isolating TMH rooms away from street noise, water pipes, and noisy heating/cooling ducts is also a good idea.

Equipment and Furniture Placement
While choice of furniture is up to the provider or organization, there are some factors to consider when setting up the room for a VTC encounter. Although tables are necessary for many TMH encounters on the patient end, a table on the provider end that sits between the camera and the provider may create a feeling of distance that could inhibit rapport. A small table that is easily moved out of sight during a VTC encounter may prove a better choice for a provider-end VTC room, if possible. Of course, many VTC encounters will occur from a desktop mounted system where the above consideration is not feasible. Chairs that swivel and create excessive movement can create blurring that can impair the video quality.

Camera position and angle are also important considerations in VTC room design. It is best to position cameras at a distance and height easily viewed by both patient and provider and in a manner that can capture the best image. The ideal camera placement distance is about six feet between the patient/provider and the camera. It is recommended that the cameras are positioned in a way that allows the images of patient and provider to appear straight-on and centered in their respective monitors. It is also recommended to angle the camera in a manner so that both patient and provider appear to speak eye-to-eye with each other.

4.4 Clinic Procedures

4.4.1 Scheduling

There is currently no special or central scheduling system for TMH within the DoD. Scheduling for TMH should proceed according to established SOPs. Keep in mind that TMH scheduling will require some coordination between the patient and the provider site, so scheduling procedures should account for that added element.

4.4.2 Documentation, Coding, and Record Keeping

Telemental health is documented using the same standards and methods as face-to-face care. If electronic record keeping is an organizational requirement, the same should be applied when providing TMH services. It is important to document in the patient's records where both the originating and distant sites are located and that the mental health services were provided using VTC technology. Generally, the site where the patient is located should ensure that all necessary pre-encounter documentation (e.g., intake and consent forms) is completed and securely transferred to the provider site for review. All record keeping, including the storage and transmission of patient records should be done in accordance with federal, state, and local laws, including HIPAA, just as if face-to-face care were being provided.

Most organizations have coding systems for medical services. The Military Health System has Coding Guidelines and there is a section on telehealth and remote professional services in those guidelines.[25] However, there is no specific Common Procedural Terminology (CPT) code for TMH services. The normal coding for mental health services applies, and the distant site provider usually codes the service. There is a CPT modifier ("GT") for the provider to specify that the care was delivered synchronously via interactive audio and video telecommunications system (e.g., VTC). There is also a "GQ" code to designate that care was delivered using an asynchronous telecommunications system (e.g., if medical records was transmitted for review by a provider at a later time). There is a Healthcare Common Procedure Coding System code ("Q3014") for the patient site to use to designate workload credit and the cost of attending to the patient as an originating site. U.S. Army Medical Command TBH Operations Manual offers additional coding guidance.

4.4.3 Privacy, Confidentiality, and Informed Consent

As with any traditional face-to-face mental health encounter, written informed consent prior to the initial TMH encounter is typically a standard of care. While there is currently no standard DoD-wide consent form specific to TMH, please see below for some common items to consider. Also, the U.S. Army Medical Command TBH Operations Manual states that it has developed a telehealth consent form (MEDCOM Overprint 45: Telehealth Consent – Authorization to Receive or Record Telehealth Services).[2] According to that Operations Manual, MEDCOM Supplement 3 to AR 40-66, Medical Records Administration and Healthcare Documentation describes the rules for use of that consent form; those rules are mentioned in the Operations Manual.[2]

It is important to note that consent for traditional face-to-face care does not necessarily extend to a TMH encounter. It is recommended that additional written informed consent is obtained for a patient to receive TMH services as there is additional information to convey to a patient before conducting a TMH session. Some elements that consent form might contain include the following:

- the nature of TMH using VTC and what it entails;
- the risks and benefits of TMH using VTC, and that there is an empirical literature base on its application, effectiveness, and potential risks;
- that there are two sites participating in their care, along with the roles and responsibilities of each site with respect to their care;
- the security measures taken to ensure compliance with HIPAA and protect patient privacy when documentation and information is shared between the two sites;
- that they are not being recorded, and separate written approval and consent is needed in order to videotape a session;
- that there are policies and procedures in place in case of technical breakdown or clinical emergency; and
- informing the patient that they have an option to refuse TMH care and if so, they retain the option of receiving face-to-face care.

In addition to obtaining written informed consent, it is also recommended to inform the patient about the extent to which their privacy is being protected. In particular, it is helpful to identify everyone who is participating in the encounter from both sites and let the patient know that no one else is in the room at the provider site when the provider is alone. Sometimes scanning the camera around the room at the onset to show the patient this can help alleviate any concerns the patient might have. Also consider explaining the extent to which the room is soundproofed from those outside the room. Ultimately, the staff should take all necessary steps in their judgment to ensure patients that privacy and confidentiality issues are addressed.

4.4.4 Emergencies and Patient Safety

When providing TMH care, it is essential to have clear and established protocols in place to handle technical, medical, and clinical emergencies. Collaboration and agreement between the sites regarding emergency procedures is vital. Organizational SOPs should contain emergency protocols that take into account local emergency plans, as emergencies will generally be handled consistent with existing emergency protocols at the patient site. At a minimum, emergency protocols should include the following:

- the provider at the distant site should have a secondary method for immediately contacting the patient and staff at the originating site in case of equipment failure;
- someone at the originating patient site should always be on call as a point of contact to manage patient emergencies during the working hours that TMH care is being delivered;
- both sites should have immediate access to emergency contact numbers that can respond to the originating site in the event of an emergency (e.g., local law enforcement, facility security, emergency medical response teams); and

- the SOP should assign responsibility for contacting emergency personnel in the event of an emergency.

4.4.5 Staff Training

It is strongly recommended that staff training requirements are addressed when creating organizational SOPs. The Service SOPs that currently exist do call for telehealth training, though the specifics of the training may vary. Individuals should check with their respective Service on specific telehealth training requirements.

It is important to note that telemental health is not a type of therapy but rather a mechanism to deliver mental health services by those presumably already sufficiently trained in the type of service (e.g., an intervention, diagnostic interview, family counseling) they are delivering. Providers should at all times abide by the guidelines and ethics codes of their respective professional organizations, as well as appropriate laws, when delivering any form of care.

As this guidebook points out, there are some additional considerations to attend to when delivering care via TMH. Providers, administrative staff, and technical staff could all benefit from additional information and targeted training around considerations relevant to TMH. In particular, all staff should have some training on the use of the equipment, basic technical troubleshooting, the design and maintenance of an optimal setting for TMH delivery, and how to handle emergencies. It is recommended that all providers demonstrate competency with the equipment. There are also some practical clinical considerations as we discuss in a later section that could form the framework for further provider training in delivering TMH care.

4.4.6 Quality Assurance and Improvement

TMH offers a unique and broad range of potential benefits for the patient, their family, the provider, the organization, and the community. TMH may impact such broad outcomes as access to care, cost, satisfaction, quality of service, building healthy communities, and within the DoD, Warrior readiness. It is recommended that organizations providing TMH services put in place quality assurance/program evaluation measures to ensure that the intended benefits of telemental health are being delivered.

There are a variety of ways to measure the quality of services delivered. Recommendations for a reasonable quality assurance model include patient satisfaction surveys, provider satisfaction surveys, a provider peer review process, technical systems monitoring and feedback from patients and providers, and medical records audits to ensure proper informed consent and documentation of encounters. Organizations may also consider capturing data and measuring other outcomes based on program goals, such as level of stigma, time to initial and follow-up appointment, travel time and cost saved, total number of encounters, time to diagnosis, work time missed for patient and family due to appointment, and days off from duty for DoD personnel. This list is not meant to be exhaustive, but is meant to illustrate the broad range of benefits that TMH may impact. It is recommended that each organization's SOP specify the respective areas of data gathering for quality assurance purposes based on program or project goals

and provide the procedures for remedial action to improve the level of service on the data acquired.

5. CLINICAL PRACTICE GUIDELINES

5.1 Range of Services

There are no absolute contraindications to TMH services based on current information in the published literature. The American Telemedicine Association *Practice Guidelines for Videoconferencing-Based Telemental Health* addresses the issue of exclusion criteria as follows: "The inclusion of cases for a telemental health consult is at the discretion of the referring and consulting clinicians. There are no absolute contraindications to patients being assessed using telemental health." [5] The only absolute exclusion criterion is if the patient refuses to consent to using TMH services. Each organization or facility can best determine the range of appropriate services to offer based on staffing, facility logistics and resources, and local patient needs. Each provider can ultimately decide who is, and who is not, appropriate for TMH care. If the provider judges that there are reasons to exclude someone from receiving TMH care, then they should not provide that person care via TMH (note: it is certainly possible that one provider would be comfortable providing TMH care for a patient that another provider is not, as is true with other care delivery). While industry standards and clinical conventions are changing based on evolving research and clinical practice, there remain certain situations where TMH through videoconferencing may not be appropriate, based on clinical judgment:

a. When the patient is acutely unstable, suicidal, and/or may require emergency care or involuntary commitment due to their presentation. This might include situations where the patient is acutely violent or impulsive to the point where there is a risk of affecting equipment and/or staff and other patients' treatment. This might include situations where the patient is severely decompensated due to delirium, intoxication, medication toxicity, or medication interaction, and may require immediate hospitalization.
b. Patients who present with specific symptoms that could worsen with the use of telecommunications technology (e.g. florid psychosis involving ideas of reference, thought insertion, delusions related to technology).
c. Patients with any medical issues that require monitoring at the site if the site is not equipped to monitor those medical problems.
d. Patients who present with cognitive and/or sensory deficits that might impair their ability to use and/or interact over the technology. In this case, family members or staff on site may be able to help facilitate.
e. Administering certain cognitive tests may present difficulties and may require modifications and plans in place to have someone assist at the originating site.
f. As always, clinicians should consider potential cultural issues that a patient might have related to the use of technology. For example, some elderly patients may feel less comfortable with technology and may be reluctant to receive services in this manner.

5.2 General Clinical Issues

It is expected that any provider delivering clinical services is proficient in the clinical service being provided. In addition, there are several clinical considerations for best practice that may enhance the TMH experience. Below, we describe some clinical issues to consider prior to, during, and after the TMH encounter. Also, please see a checklist in Appendix E that covers many of these issues in one convenient form.

5.2.1 Before the Telemental Health Session

Before the patient arrives, both the patient and provider sites should power up and test the equipment. A test call to ensure functioning connectivity on both ends is recommended. Each site should have contact information for each other readily on-hand in case of technical issues or emergencies.

Provider Clothing and Attire

To optimize picture quality, providers should consider their clothing and attire when delivering TMH. Dark, solid clothing colors are best, while lighter clothing – including lab coats – may negatively impact image quality. Providers should avoid clothing with complex patterns such as plaids, stripes, or floral patterns. Of course, uniformed providers may have less flexibility when choosing attire. Other clothing items to avoid include large pieces of jewelry that reflect light, dangling jewelry that may cause a visual or audio distraction, and hats that may cause shadows over one's face.

5.2.2 During the TMH Session/Clinical Interaction via VTC

When providing care via VTC, there are some additional considerations during the session that may improve the encounter. For one, interviewing via VTC may take longer than doing so face-to-face, so it is important to schedule sufficient time. The provider should let the patient know all who are participating in the session and introduce each person, particularly if there are people off camera. Additional clinical considerations are noted below.

Given that many patients will be new to using the technology, it is recommended that providers begin sessions with some small talk to help establish rapport and as a way of allowing the patient to feel comfortable interacting with the technology. As the technological functioning of the audio and video is essential, it helps to ensure that the patient can hear and see adequately right away. It is also helpful to ensure that both elements are working sufficiently on the provider end so that the provider can read patient nonverbal cues. If either the audio or video are not optimally capturing sound and image, the provider might be able to make some minor adjustments (e.g., close the blinds if light is coming in from a window, ask the patient to remove a hat). The provider can obtain initial feedback from the patient to ensure quality equipment operation. The provider should also maintain awareness of any technical problems that might arise during the session and attempt to address the ones they can.

During the encounter, the provider should make and maintain eye contact as much as possible. It is also important for the provider to remain as attentive as possible, not

appear distracted, and avoid making distracting sounds that the microphone might pick up. Typing on the computer, finger/pen tapping, paper shuffling, and turning away from the camera to write during the encounter can all be picked up and amplified, drawing attention to the technology and away from the treatment. Turning off or silencing anything that makes noise, such as fans, pagers, white noise machines, and phones is recommended. Placing a sign on the outer side of the door can remind others outside of the room to avoid creating noise during encounters. During the encounter, the provider should also remain mindful of any excessive movements (e.g., hand gestures, facial expressions, and chair movement) as these may appear amplified or distort the image using VTC.

The provider should remain in view of the camera at all times. Due to the slight delay that may occur when using VTC, the normal flow of conversation can become more deliberate. Both the provider and patient should try to speak more slowly, in complete thoughts, and then stop and listen.

5.2.3 After the Telemental Health Session

When finishing a telemental health encounter, it is a good idea to give the patient opportunity to ask any questions they may have and address any concerns regarding the use of VTC. The provider should remain aware if the VTC connection will remain active for additional appointments, any vocalizations or sounds they make can still be heard on the other end. The provider should continue to be mindful of noises that may transmit to the patient site in between appointments as the provider may not always know exactly when the patient and/or staff are entering the room. The patient may also think the connection is off when the encounter ends and the provider should remain aware that patient vocalizations and sounds may continue after the end of the encounter if the connection remains as the patient leaves the room. If no further appointments are occurring, the provider should ensure that the VTC connection is completely turned off.

5.3 Clinical Emergencies

Clinical emergencies should be handled pursuant to established SOPs with the patient site. It is recommended that the distant site clinician have knowledge of the notification and commitment laws at the patient site, and have on hand local emergency referral resources. Coordination between sites on clear procedures to follow in an emergency is essential.

5.4 Cultural Competency

As with any form of behavioral health service, it is necessary to have the requisite cultural awareness of the population one is serving. The same holds true for TMH. Of particular relevance for TMH is the patient's prior experience with and comfort level with technology. This has relevance both in terms of cultural expectations about appropriate uses of technology, and in terms of possible concerns about confidentiality or security related to the use of technology. Providers should consider the patient's comfort level with technology and address any issues that may impact patient presentation. Asking about the patient's expectations and history with technology may uncover some

concerns. The provider may also assess the patient's comfort level by processing how they felt about using VTC at the end of the first encounter and/or later encounters. An additional resource offers a fuller discussion of the issue of TMH cultural competence.[26]

5.5 General Telemental Health Practice Guidelines

The American Telemedicine Association has published two resources for TMH practice. It is recommended that all staff participating in providing TMH services become familiar with these resources. They are the *Practice Guidelines for Videoconferencing-Based Telemental Health* [5] and *Evidence-Based Practice for Telemental Health*.[6] In addition, the American Academy of Child and Adolescent Psychiatry published *Practice Parameter for Telepsychiatry with Children and Adolescents*.[27] An additional ATA practice guideline for internet-based videoconferencing TMH using desktop computers is expected soon. That guideline is expected to include additional information on handling emergencies.

Appendix A **– T2 Telemental Health VTC - Basic Equipment Troubleshooting Checklist**

Check ☑	POWER	DISTANT SITE	ORIGINATING SITE
	Is the VTC system power turned on?		
	Is the power strip turned on?		
	Is the power cord plugged into the electrical outlet?		
	Is the power cord plugged securely in the VTC system?		
	Are the batteries in the remote control good?		
☑	**AUDIO**	**DISTANT SITE**	**ORIGINATING SITE**
	Is the mute button on?		
	Is the volume setting high enough to be heard?		
	Is the microphone connection secured properly?		
	If there are external speakers, is the speaker volume turned on?		
	Are the audio connectors (red and white cables) connected to their respective inputs?		
☑	**VIDEO**	**DISTANT SITE**	**ORIGINATING SITE**
	Is the monitor input correctly connected (the 'video in' cable should be connected to the video input)?		
	Is the monitor output cable(s) connected? (follow the monitor cord to the VTC system and ensure that it is plugged into the correct port)		
	Is the correct camera source selected?		
	Is the correct display setting selected?		
☑	**NETWORK**	**DISTANT SITE**	**ORIGINATING SITE**
	Is the network cable plugged into the VTC system correctly?		
	Is the network cable plugged into the wall jack correctly?		
	Is the network cable broken on either end?		
	Is the IP information correct?		
	If problem still persists, contact IT support		

Appendix B – **Preliminary Needs Assessment Questions**

General Overview

1) What do you see as the greatest healthcare access challenges facing your beneficiaries?
    a. In general medical care?
    b. In specialty medical care?
    c. In mental/behavioral health care?
    d. In patient education and prevention efforts?
2) Where (locations & types of services) would you most like to see telehealth services started or expanded? Who are the providers who will be willing to help with the expansion of telehealth care?
3) Where will patients receive care and from where are providers delivering care?
4) When do you want to begin? Become fully operational?
5) When during the day can telehealth care be provided?
6) What investments (time, personnel, technology, space, supporting services) are you prepared to make in order to expand access to care through telehealth?
7) How are you planning to maintain the services? What help is needed in this regard?

Clinical Services

1) What services are you currently offering? What do you want to offer?
2) Do you have any existing SOPs? If so, please send with these questions.

Business Processes

1) Are you familiar with/establishing processes for Credentialing and Privileging and Workload Accounting and Coding?

Policy and Guidelines

1) What guidelines have you followed to develop plans and procedures?

Assessments

1) Have you determined whether providers and patients will utilize telehealth?

IT Requirements

1) What equipment do you currently have available for telehealth? What are you expecting to acquire?
2) What is the current bandwidth and number of connections into proposed telehealth sites?
3) How much bandwidth is likely to be allocated for telehealth care?
4) Are you working off an IP or ISDN network?
5) Who supplies the network back-up?

Future Implementation

1) What do you think are the most critical issues to address that might hinder or enhance more widespread telehealth implementation? (e.g., structural/administrative changes to providing care, patient education, provider acceptance, provider training and education, technology costs and integration, etc.)
2) How do you view leadership support for telehealth and what information or data might impact their level of support?
3) Where do you see the biggest need/optimal insertion points of telehealth for the future?

Appendix F: Legal Opinion on TH to Patient's Home (9)

MCJA 13 May 2016

MEMORANDUM for Mr. Paul Rivera, Army Telehealth, G3/5/7 Patient Care Integration Directorate Headquarters, USAMEDCOM, 2846 Worth Road, JBSA, Fort Sam Houston, Texas78234

SUBJECT: Legal Opinion Regarding Telehealth (TH) to the Patient's Home, Provider Liabilityand Continued Coverage under the Federal Tort Claims Act (FTCA)

1. Purpose. To advise that Department of Defense (DoD) Active Duty (AD), General Schedule(GS), and Personal Services Contract (PSC) providers who engage in TH to patients' homes in accordance with existing DoD, Army and MEDCOM Policies and Procedures governing TH should be eligible to receive FTCA coverage for any injuries caused by negligence of the providers in delivering the medical care or treatment to the same extent that coverage is availablefor the services they provide in Military Health System (MHS) fixed facilities. Acts of non- personal services contract providers and intentional torts (i.e.; assault, battery, libel, slander, misrepresentation) are excluded from FTCA coverage.

2. Background and Discussion. You requested this legal opinion in order to respond to providers who voiced concerns that provision of TH services to patients at locations other thanan MHS facility would result in those providers losing FTCA coverage in the event a patient filed a claim or initiated a lawsuit for injuries the patient believes was caused by the care delivered by TH. Following is a discussion of the relevant law and policy to illustrate how provision of TH to the patient's location, even if in a different State, evolved to include such services as within the course and scope of a Federal provider's employment, for purposes of FTCA coverage.

a. FTCA. The FTCA was originally enacted in 1946 to provide a remedy for injuries caused by Government negligence and to relieve Congress of the burden of handling private relief bills. Generally, the FTCA permits recovery for personal injury or death caused by government employees acting within the course and scope of their Federal employment. First, the negligent actor must be a Federal employee acting within the scope of Federal employment. Providers who are PSC are considered Federal employees for purposes of the FTCA because the US has the authority to control the detailed physical performance of the PSC and to supervise their day- to-day operations, as is also true of AD and GS providers. As noted above, non-personal servicescontractors are excluded from coverage under the FTCA. Second, the Federal employee must beacting within the course and scope of Federal employment. This element is most persuasively met by compliance with and acting within Government guidance pertaining to the acts undertaken.

b. Westfall Act. The Federal Employees Liability Reform and Tort Compensation Act of 1988, known as the Westfall Act, amended the FTCA to provide absolute immunity from state and common law torts for Federal employees acting within the scope of employment. Thus, medical negligence actions against Federal providers must be brought in or removed to Federal

District court and the lawsuit becomes an FTCA cause of action against the Government. The medical malpractice actions are against the US, instead of the individual provider, and the style, or title of the case is reflected as Plaintiff (patient or patient's estate) versus the United States, rather than the individual provider(s).

a. Licensure Portability. 10 USC §1094(d) addresses portability of licenses for AD, GS and PSC employees of the DoD. Pursuant to this Federal statute, a DoD provider who possesses a valid license issued by any State may practice his/her profession in a DoD healthcare facility, a civilian facility affiliated with DoD, or any other location designated by the Secretary as long as the provider is practicing within the scope of his/her authorized Federal duties. Therefore, providers can respond to an off-post disaster in any State, commonwealth, the District of Columbia, or territory if they are in the execution of and acting within the scope of orders with the expressed or implied approval of the Secretary of Defense. The subsequent STEP Act and ASD(HA) Memorandum authorizing provision of TH services to the Patient's Location extend the licensure portability to providers delivering TH services to patients located in another State, as long as they are acting within the scope of their Federal duties.

b. STEP Act. In section 713 of the National Defense Authorization Act (NDAA) of 2012, Congress enacted the Service Members' Telemedicine and E-Health Portability, or STEP Act. The STEP Act amends 10 U.S.C. § 1094(d) to expand the categories of providers that receive licensure portability across state lines. It also expands the locations at which providers can practice to receive this licensure portability, to effectuate the use of TH in the DoD. Specifically, the STEP Act states that providers may practice health care at any location, regardless of where the provider or patients are located, as long as the provider is within the scope of authorized Federal duties.

c. DoDM 6025.13. On October 29, 2013, the DoDM was published, and included implementing regulations for the STEP Act. Specifically, the Additional Conditions requirements in DoDM, Encl.4, Sec.6.b clarified that under current DoD guidance, an exception or waiver from ASD(HA) is necessary for Army TH providers to perform In-Home Clinical Care.

d. ASD(HA) Waiver. On 3 February 2016, the ASD (HA) issued a Memorandum entitled, Provision of Telemedicine at a Patient's Location. The Memorandum narrowed the gap between the STEP Act and the DoDM implementation. The Memorandum authorizes TH to the patient's home or other patient location deemed appropriate by the treating provider, as an originating site for the receipt of TH services from providers located in an MTF or other designated facility. The TH provider must be privileged at the distant site and must inform the patient's MTF or TRICARE network primary care manager of the care delivered via telemedicine. The Memorandum emphasizes that the requirements of DoDM, Encl.4, Sec. 6b (1-2) apply, and imposes 4 additional requirements:

(1) Treating providers must determine that the patient' s medical or psychological condition can be treated safely and effectively via telemedicine in the home or other non-MTF setting, and document the rationale for use of telemedicine and any care or

advice provided in the patient's medical record.

(2) Telemedicine at the patient's location must occur on a secure, DoD-approved health information technology platform that meets the requirements of the Health Insurance Portability and Accountability Act (HIPAA).

(3) Prior to (or at the outset of) the treatment encounter, the provider and patient must agree upon a back-up plan for communication in the event that the secure telemedicine link is disconnected. This plan must be documented in the patient's medicalrecord.

(4) The DHA, in collaboration with the MHS Telehealth Working Group, will provide guidance regarding implementation of telehealth at a patient's location, to include coding practices and reporting requirements.

2. Conclusion. DoD AD, GS and PSC providers who engage in TH to the patient's location will receive FTCA coverage for those services so long as they deliver those services in compliance with MEDCOM and DoD instructions and policies. If DoD AD, GS and PSC providers are in compliance with those policies, they will be considered within the course and scope of their Federal employment.

3. POC for this memorandum is the undersigned, who can be reached at 210-221-6989/8400 or Rosalind.d.gagliano.civ@mail.mil.

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Digitally signed by GAGLIANO.ROSALIND.DUPIN.1053205069
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ROSALIND D. GAGLIANO
Attorney-Advisor

Appendix G: MHS Video Connect Peer Expert Training (6)

Defense Health Agency

MHS Video Connect

Peer Expert Training

(Legacy Sites)

Approved v5.1, March 2022

Agenda

- ❑ MHS Video Connect milSuite page
- ❑ MHS Video Connect Overview
- ❑ Workflow
- ❑ Scenarios
- ❑ Demo
  - ❑ Preferences Set Up
  - ❑ Search for Provider Appointments
  - ❑ Search for Patient Appointment(s)
  - ❑ Create a Video Visit
  - ❑ Edit/Resend/Cancel Video Visit
  - ❑ Clone a Video Visit
  - ❑ Conduct a Video Visit
  - ❑ End a Video Visit
- ❑ Resources
- ❑ MHS VC Help

Learning Objectives

- ❑ Identify the purpose of MHS Video Connect
- ❑ Identify the benefits of MHS Video Connect
- ❑ Set personal preferences in the Virtual Care Manager tool
- ❑ Create a Video Visit in the Virtual Care Manager tool
- ❑ Search for a Provider's Appointments
- ❑ Search for a Patient's Appointment (s)
- ❑ Edit/Resend/Cancel a scheduled video visit appointment
- ❑ Clone a Video Visit
- ❑ Conduct a Video Visit

MHS Video Connect

Mobile application which enables beneficiaries to connect to a virtual treatment room where a hands-on physical examination is not required

Standardizes virtual health care enterprise-wide and Helps the DHA reach its intent of improving tele-health care for beneficiaries

Allows beneficiaries to quickly and easily meet with MTF providers via live video on any computer, tablet, or mobile device with an internet connection

Provides fast, easy, encrypted, real-time access to care in the virtual treatment room, making appointments more convenient and reducing travel and wait times

MHS VIDEO CONNECT

MHS Video Connect Benefits



Beneficiary has health conditions that make traveling to the MTF difficult

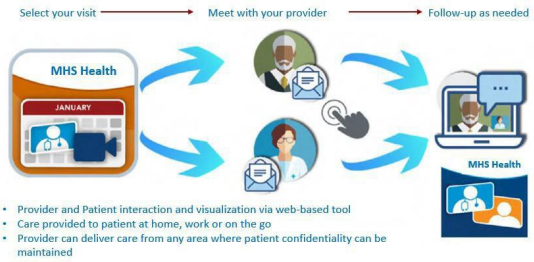


Beneficiary lacks time to regularly attend in-person appointments



Beneficiary does not require a hands-on physical examination

MHS Video Connect in Action



- Provider and Patient interaction and visualization via web-based tool
- Care provided to patient at home, work or on the go
- Provider can deliver care from any area where patient confidentiality can be maintained

What is MHS Video Connect?

MHS Video Connect enables administrative and clinical staff to create, view, and join video visits. With MHS Video Connect (MHS VC), it is easy to invite patients, family members or caregivers, as well as additional clinical staff.

Virtual Care Manager (VCM) is the scheduling component within MHS Video Connect.

What is MHS Video Connect?

MHS Video connect is a virtual room…

MHS Video Connect application (app) enables you to **connect** to a virtual treatment room. In the virtual treatment room, you participate in **video** health care visits where a hands-on physical examination is not required.

NOTE: This is a web-based application.

Who uses MHS Video Connect (VC)?

- ❑ Scheduler: Medical Service Assistant (MSA/Admin/Front Desk Clerk)
- ❑ Clinic Staff: Nurse/Tech/MSA (Screener/Check-In Coordinator)
- ❑ Provider

*NOTE: The MSA/Admin/Front Desk Clerk/Nurse/Tech/Provider roles can all be considered "Schedulers" for MHS Video Connect appointments

MHS VC is used when…

- ❑ Face-to-face is not needed as determined by clinical staff
- ❑ Patient has access to electronic device that supports a web connection for voice and video…
- ❑ Patient has been scheduled a video visit in the Electronic Health Record (EHR)

Workflow Scheduling Appointment

- ❑ Scheduler/Clinical Staff/Provider
  - Receive appointment request
  - Update demographics/registration & validate email
  - Book virtual appointment in CHCS and MHS VC (Virtual Care Manager)
  - Provide appointment instructions to patient
  - Invite patient and enter information for patient profile (First and Last name)
  - Validate/obtain patient email address
  - Add patient Identifier in comments (DOD ID/Last Name initial and last 4 of SSN)
  - Invite additional family members/care givers (Guests) or MTF Staff
  - Create visit

***The Video Visit link may be resent in cases where the patient cannot find their email with the URL or they do not join the video visit as expected.*

Workflow Conducting Appointment

- ❑ Provider

Two Ways to Join a Video Visit

- Log into Virtual Care Manager using Google Chrome and a CAC enabled device

OR

- Click on the appointment URL within the auto-generated email received when the patient scheduled the video visit

Join a Video Visit via Virtual Care Manager

- Locate the patient's video visit appointment in Virtual Care Manager and click to open
- Click Start Video Visit
- Click Connect
- Click e911 to confirm patient's emergency contact information
- Verify patient's current location at the time of the video visit
- Pre-validate address
- Enter Provider Call back number
- Conduct video visit

Scenarios

■Scenario 1: A patient has requested a video visit by calling the MTF clinic directly or by sending a Secure Message to their Provider. The scheduler schedules the virtual appointment in CHCS and Virtual Care Manager. 3-days prior to the scheduled appointment the clinical staff (i.e. nurse/medic) calls the patient to verify if the patient has the necessary technical pieces to move forward with the video visit (connections/hardware/camera) and if a video visit is still warranted. On the day of the appointment, the Provider will access Virtual Care Manager or will click on the Video Visit link provided in the notification email to initiate the video visit with the patient. Then, the Provider will document the encounter in the EHR. Follow-up appointment/instructions are provided to the patient.

NOTE: *3-days prior* is stated for training purposes. Calling a patient to verify if the virtual appointment is still required and if the patient has the required technical pieces to join the virtual video visit is based on clinic/facility protocol.

Scenarios

- Scenario 2: A patient has scheduled a virtual appointment thru Tricare Online or via the Consolidated Appointment Center. 3-days prior to the scheduled appointments day the clinical staff reviews the appointment schedule for any virtual appointments. The appointment has been scheduled in CHCS but now needs to be scheduled in Virtual Care Manager. The clinical staff calls the patient to verify if the patient has the necessary technical pieces to move forward with the video visit (connections/hardware/camera) and if a video visit is still warranted. On the day of the appointment, the Provider will access Virtual Care Manager and click on Patient "ONLINE" status or will click on the Video Visit link provided in the notification email to initiate the video visit with the patient. Then, the Provider will document the encounter in the EHR. Follow-up appointment/instructions are provided to the patient.

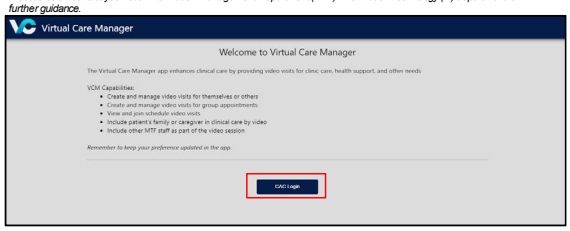
NOTE: *3-days prior* is stated for training purposes. Calling a patient to verify if the virtual appointment is still required and if the patient has the required technical pieces to join the virtual video visit is based on clinic/facility protocol.

Logging into Virtual Care Manager (VCM) and Scheduling Video Visit Appointment

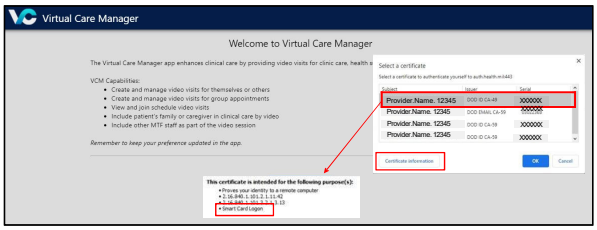
Log In to Virtual Care Manager

- Enter the link into **Google Chrome** to access **Virtual Care Manager**: https://scheduling.v3.health.mil/welcome/
- Click the **CAC Login button** to log in
- Select your **CAC Authentication** certificate and enter your **PIN**

NOTE: *With regard to selecting your PIV authentication certificate, please follow your local guidance and Desktop Procedures or contact your local Information Management Department (IMD)/Information Technology (IT) department for further guidance.*

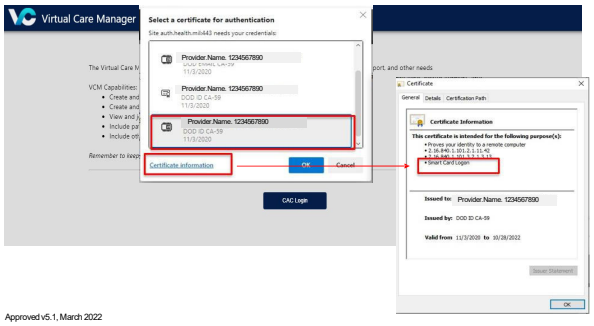


Selecting PIV Authentication Certificate (Google Chrome)



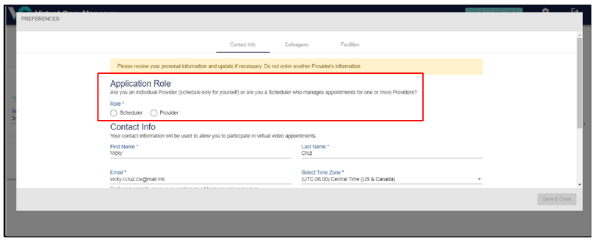
Tip: *You can highlight a specific ID certificate and select the option to look at the Certificate information. You'll want to use one that has the Smartcard logon purpose.*

Selecting PIV Authentication Certificate (Microsoft Edge)



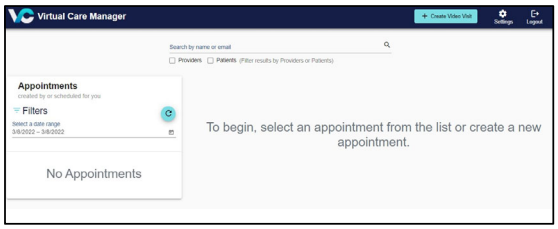
Virtual Care Manager

- The first time a user logs into the VCM the Preferences screen will be displayed
- Select **Role** (Scheduler or Provider)
  NOTE: The next time the user logs in they will be taken directly to the VCM home screen. If the user needs to change the Application Role click on **Settings>Preferences**.



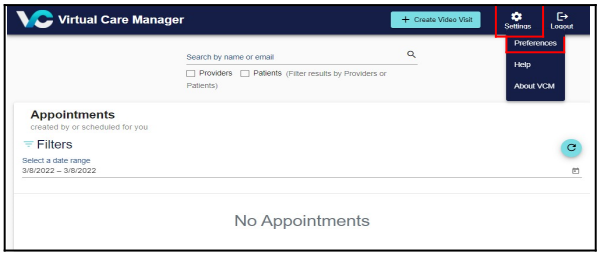
Virtual Care Manager

- **The Virtual Care Manager** home page will appear upon login
  NOTE: When the Provider logs in their scheduled video visit appointments will be displayed based on the date range selected.



Setting Preferences

- Click **Settings** in the top right corner of the screen
- Select **Preferences** from the dropdown list

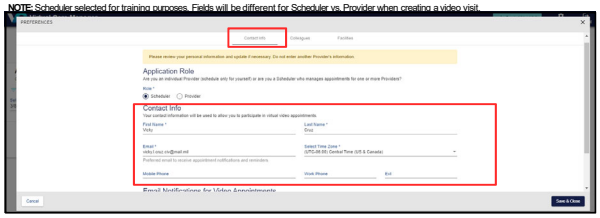


Setting Preferences (cont.)

- Enter or validate **Contact info**
  - **Enter First Name*** and **Last Name***.
  - **Enter Email*** - enter the email address at which the user would like to receive email notifications about video visits
  - **Verify** correct **Time Zone*** has been selected

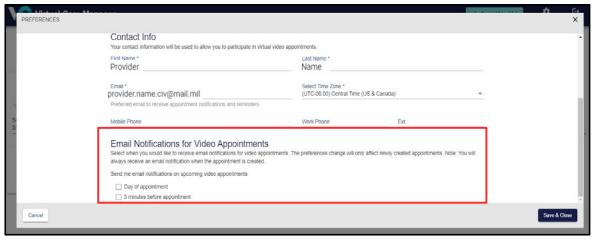
  NOTE: * required fields.

NOTE: Scheduler selected for training purposes. Fields will be different for Scheduler vs. Provider when creating a video visit.



Setting Preferences (cont.)

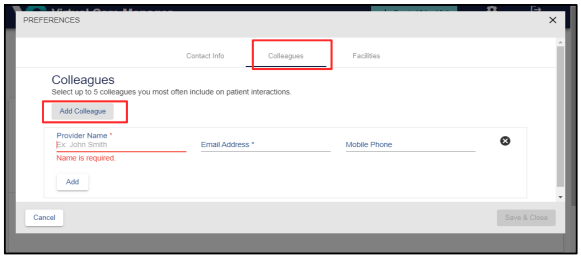
- Scroll down to **Email Notifications for Video Appointments**
- **Select** how often you would like to receive **email notifications** for upcoming video appointments



Setting Preferences (cont.)

- **Click** on **Colleagues** tab
- **Click Add Colleague**

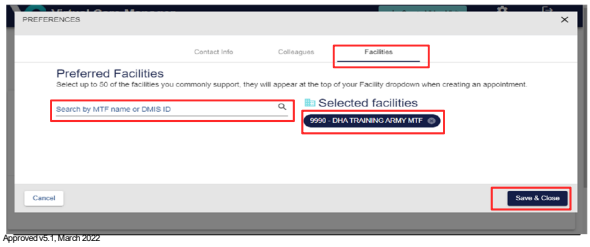
  NOTE: You can add up to ***5 Colleagues***



Setting Preferences (cont.)

- Click on **Facilities** tab
  - **Click** in the **Search by MTF name or DMIS ID**
  - **Select** preferred **Facilities** from the drop-down list

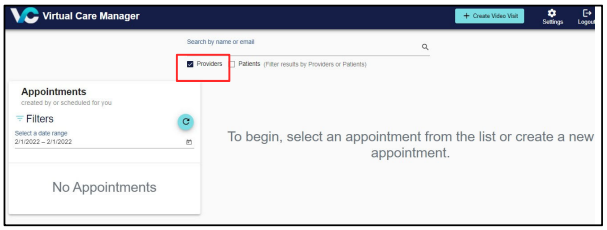
  NOTE: 9990 – DHA Training Army MTF is selected for training purposes
- Click **Save & Close**



Search for a Provider's and Patient's Video Visit Appointments

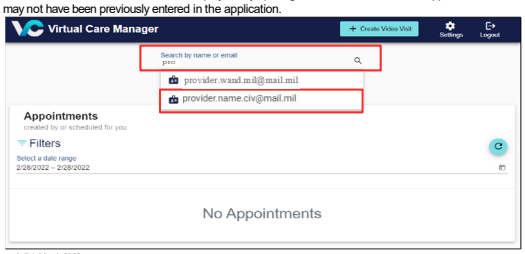
Search for Provider Appointments

- Select **Providers** under the **Search by name or email** field.



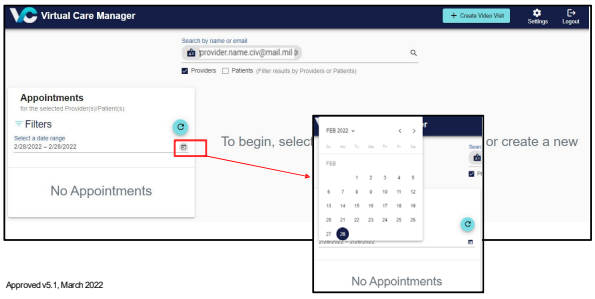
Search for Provider Appointments (Cont.)

- Enter Providers name or email.
  NOTE: As the name is being typed in a list of Providers will display in the dropdown
- Select Provider from the drop down list
  NOTE: If the Providers name does not display, verify spelling. If the name still does not appear then the Provider may not have been previously entered in the application.



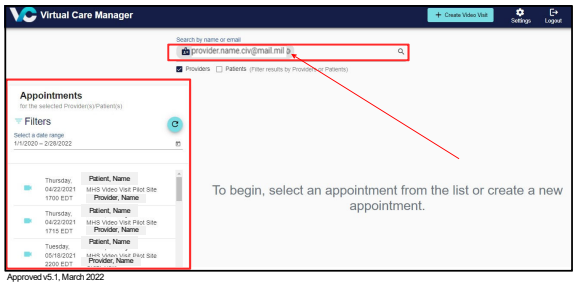
Search for Provider Appointments (Cont.)

- Select a date range by clicking on the calendar icon
  NOTE: The calendar pop up will be displayed



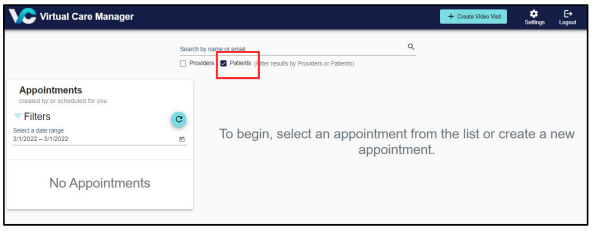
Search for Provider Appointments (Cont.)

- The Provider's appointments for the date range selected will be displayed.
  NOTE: To remove the Provider's name from the search field click on the **x** next to the Provider's name/email.



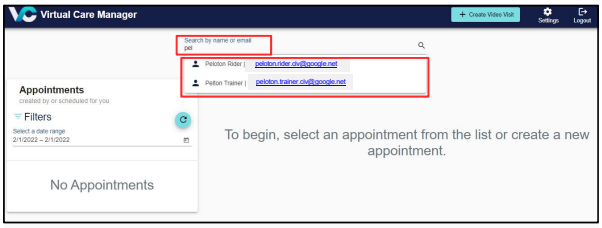
Search for Patient Appointment(s) (Cont.)

- Select **Patients** under the **Search by name or email** field.



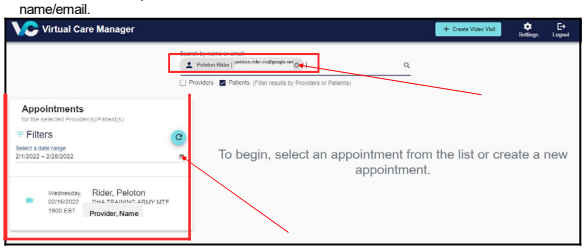
Search for Patient Appointment(s) (Cont.)

- Enter Patient's name or email.
  NOTE: As the name is being typed in a list of patients will display in the dropdown
- Select Patient from the drop down list
  NOTE: If the Patient's name does not display, verify spelling. If the name still does not appear then the Patient may not have been previously entered in the application.



Search for Patient Appointment(s) (Cont.)

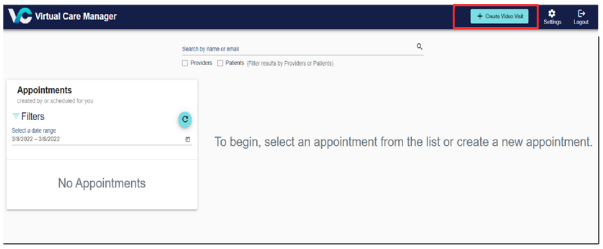
- Select a date range by clicking on the calendar icon
- The Patient's scheduled video visit appointment(s) for the date range selected will be displayed.
  NOTE: To remove the patients name from the search field click on the **x** next to the Patient's name/email.



Create a Single Patient Video Visit Appointment as a Scheduler

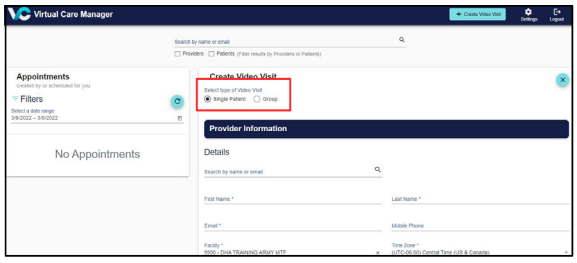
Create a Single Patient Video Visit as a Scheduler

- Click **+ Create Video Visit**



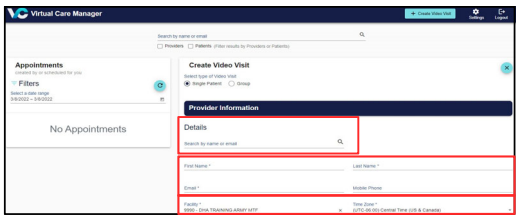
Create a Single Patient Video Visit as a Scheduler (Cont.)

- Select **type of Video Visit** (Single Patient)



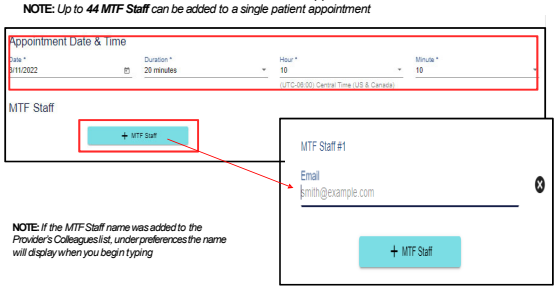
Create a Single Patient Video Visit as a Scheduler (Cont.)

- Type the Provider's name in the **Search by name or email** field. A list of names will be displayed
  NOTE: The search will pull from a list of providers that have already been entered in the VCM
- Select the **Provider's name** from the list. Notice that the remaining fields (First Name*, Last Name*, Email, Facility* and Time Zone*) will auto populate with the Provider's information (based on what that provider entered in their preferences)
  NOTE: If the Provider's name does not display then the information will need to be entered manually the first time
  NOTE: If a Provider's facility is not listed enter **0999** and select **0999 – UNKNOWN LOCATION**



Create a Single Patient Video Visit as a Scheduler (Cont.)

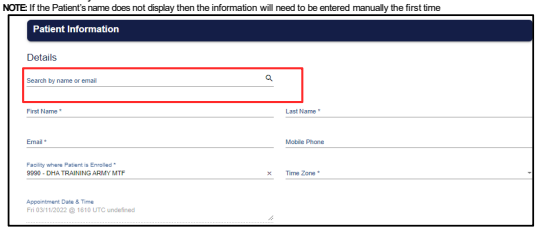
- Select the **Appointment Date & Time** and **Duration**
- Click **+MTF Staff** to add additional MTF staff to the appointment.
  NOTE: *Up to **44 MTF Staff** can be added to a single patient appointment*



***NOTE:** If the MTF Staff name was added to the Provider's Colleagues list, under preferences the name will display when you begin typing*

Create a Single Patient Video Visit as a Scheduler (Cont.)

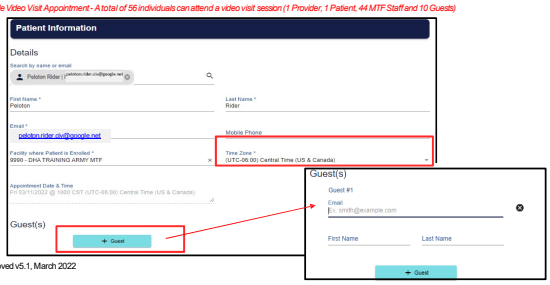
- Type the Patient's name in the **Search by name or email** field. A list of names will be displayed
  NOTE: The search will pull from a list of patients that have previously been entered in the VCM
  NOTE: If a Patient's facility is not listed/unknown enter **0999** and select **0999 – UNKNOWN LOCATION**
- Select the **Patient's name** from the list. Notice that the remaining fields (First Name*, Last Name*, Email*, Facility where Patient is Enrolled* and Time Zone*) will auto populate with the patient's information. Verify that the information is correct.
  NOTE: If the Patient's name does not display then the information will need to be entered manually the first time



Create a Single Patient Video Visit as a Scheduler (Cont.)

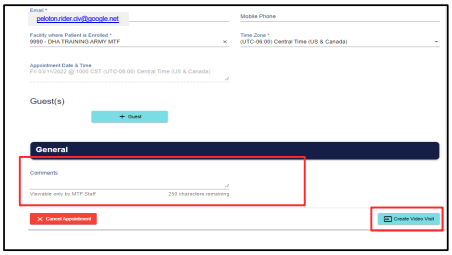
- Select the **Time Zone** that the patient will be in at the time of the appointment
  NOTE: Appointment Date & Time will have auto populated from the Appointment Date & Time selected in the Provider Information section.
- Click **+Guest** to add additional quests (family member, caregiver, etc.) to the appointment.

** Single Video Visit Appointment - A total of 56 individuals can attend a video visit session (1 Provider, 1 Patient, 44 MTF Staff and 10 Guests)*



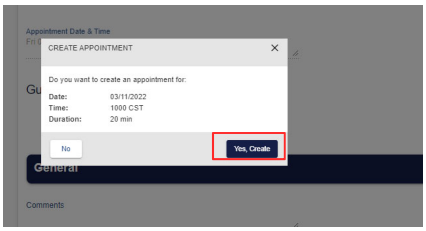
Create a Single Patient Video Visit as a Scheduler (Cont.)

- Provide any additional information in the **Comments** field
  NOTE: *The comments field is only viewable by MTF staff*
- Review the form and click **Create Video Visit**



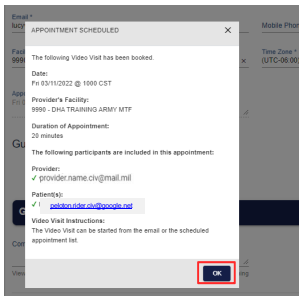
Create a Single Patient Video Visit as a Scheduler (Cont.)

- Review and verify the appointment date, time, and duration
- Click **Yes, Create** to continue
- Selecting **No**, will take you back to Create Video Visit page to edit



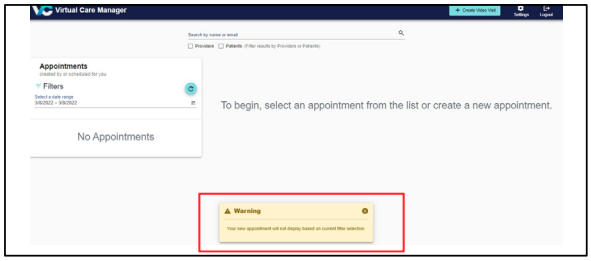
Create a Single Patient Video Visit as a Scheduler (Cont.)

- Review the scheduled appointment information and click **OK**



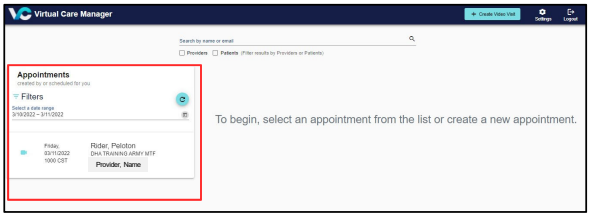
Create a Single Patient Video Visit as a Scheduler (Cont.)

- A warning message will be displayed if the correct date range is not selected, for the date the appointment was scheduled
  Warning: Your new appointment will not display based on current filter selection



Create a Single Patient Video Visit as a Scheduler (Cont.)

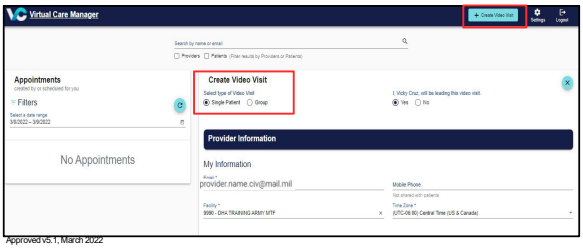
- The new video visit appointment will be displayed



Create a Single Patient Video Visit Appointment as a Provider

Create a Single Patient Video Visit as a Provider

- Click **Create Video Visit** from the Virtual Care Manager home page
- Select **type of Video Visit** (Single Patient)
- The **My Information** fields will auto populate from the information in the Provider's Preferences.
  NOTE: *If the fields do not auto populate the information will need to be entered manually. Recommend that the Provider review/update their preferences prior to creating a video visit.*



Create a Single Patient Video Visit as a Provider (Cont.)

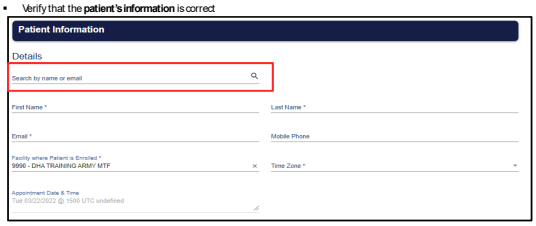
- Select the **Appointment Date & Time** and **Duration**
- Click **+MTF Staff** to add additional MTF staff to the appointment
  NOTE: *Up to **44 MTF Staff** can be added to a single patient appointment*



NOTE: *If the MTF Staff name was added to the Provider's Colleagues list, under preferences the name will display when you begin typing*

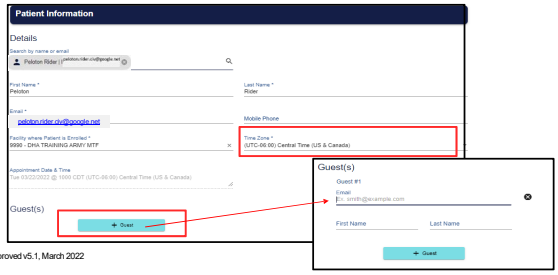
Create a Single Patient Video Visit as a Provider (Cont.)

- Type the Patient's name in the **Search by name, email** or **DoD ID** field. A list of names will be displayed
  NOTE: *The search will pull from a list of patients that have previously been entered in the VCM*
- Select the **Patient's name** from the list. Notice that the remaining fields (First Name*, Last Name*, Email*, Facility where Patient is Enrolled* and Time Zone) will auto populate with the patient's information.
  NOTE: *If the Patient's name does not display then the information will need to be entered manually the first time*
  NOTE: *If a Patient's facility is not listed enter **0999** and select **0999 – UNKNOWN LOCATION***
- Verify that the **patient's information** is correct



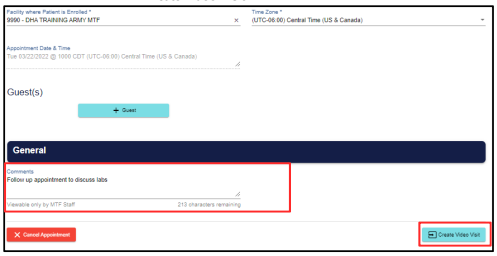
Create a Single Patient Video Visit as a Provider (Cont.)

- Select the **Time Zone*** that the patient will be in at the time of the appointment
  NOTE: Appointment Date & Time will have auto populated from the Appointment Date & Time selected in the Provider Information section.
- Click **+Guest** to add additional MTF staff to the appointment.
  NOTE: *Up to **10 Guests** can be added*



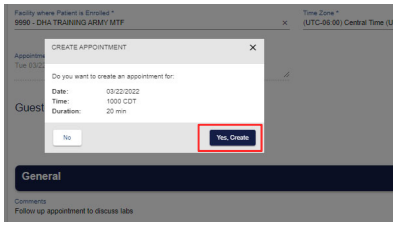
Create a Single Patient Video Visit as a Provider (Cont.)

- Provide any additional information in the **Comments** field
  NOTE: *The comments field is only viewable by MTF staff*
- Review the form and click **Create Video Visit**



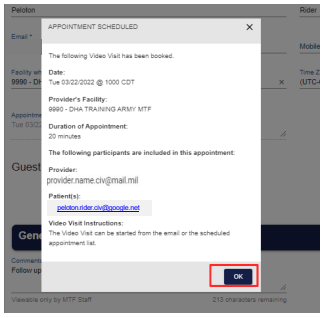
Create a Single Patient Video Visit as a Provider (Cont.)

- Review and verify the appointment date, time, and duration
- Click **Yes, Create** to continue
- Selecting **No**, will take you back to Create Video Visit page to edit



Create a Single Patient Video Visit as a Provider (Cont.)

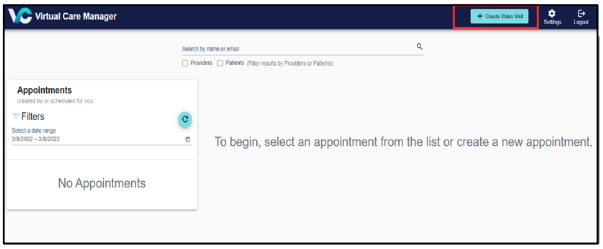
- Review the scheduled appointment information and click **OK**



Create a Group Video Visit Appointment as a Scheduler

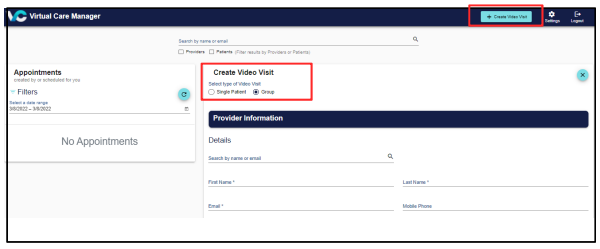
Create a Group Video Visit as a Scheduler

- Click **+ Create Video Visit**



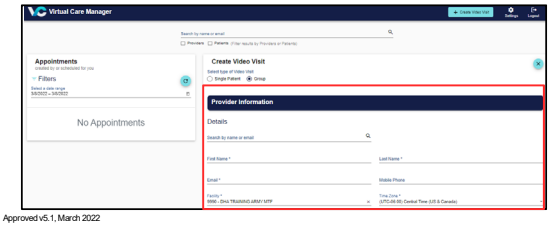
Create a Group Video Visit as a Scheduler (Cont.)

- **Select type of Video Visit** (Group)



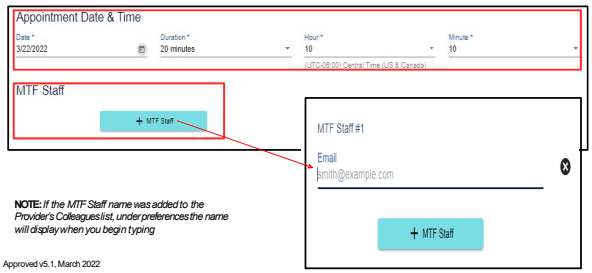
Create a Group Video Visit as a Scheduler (Cont.)

- Type the Provider's name in the **Search by name or email** field. A list of names will be displayed
  NOTE: The search will pull from a list of providers that have already been entered in the VCM
- Select the **Provider's name** from the list. Notice that the remaining fields (First Name*, Last Name*, Email, Facility* and Time Zone*) will auto populate with the Provider's information (based on what that provider entered in their preferences)
  NOTE: If the Provider's name does not display then the information will need to be entered manually the first time
  NOTE: If a Provider's facility is not listed/unknown enter **0999** and select **0999 – UNKNOWN LOCATION**



Create a Group Video Visit as a Scheduler (Cont.)

- Select the **Appointment Date & Time** and **Duration**
- Click **+MTF Staff** to add additional MTF staff to the appointment
  NOTE: *Up to **5 MTF Staff** can be added to a single patient appointment*

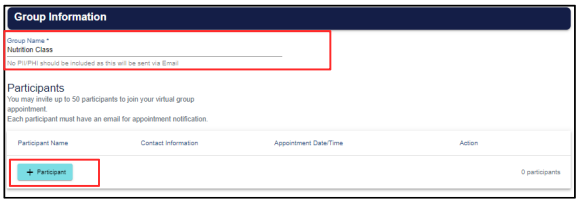


NOTE: *If the MTF Staff name was added to the Provider's Colleagues list, under preferences the name will display when you begin typing*

Create a Group Video Visit as a Scheduler (Cont.)

- Enter the **Group Name**
- Click **Add Participant**. An ADD PARTICIPANT TO GROUP dialog box will be displayed.
  NOTE: *Up to **50 Participants** can be added*

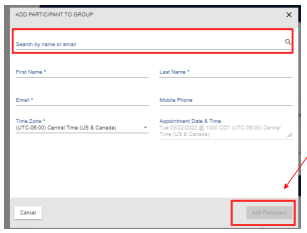
** Group Video Visit Appointment - A total of 56 individuals can attend a video visit session (1 Provider, 5 MTF Staff and 50 Participants)*



Create a Group Video Visit as a Scheduler (Cont.)

- Type the Patient's name in the **Search by name or email** field. A list of names will be displayed
  NOTE: *The search will pull from a list of patients that have previously been entered in the VCM*
  NOTE: *If the Patient's name does not display then the information will need to be entered manually the first time*
  NOTE: *If a Patient's facility is not listed/unknown enter **0999** and select **0999 – UNKNOWN LOCATION***

- Click **Add Participant**
  NOTE: *Continue adding participants as needed (Up to **50 Participants**)*

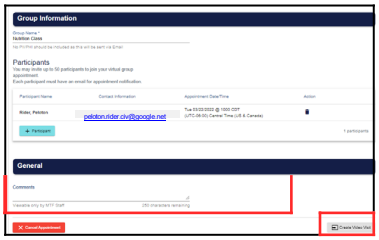


The Add Participant button will remain grayed out until the required* fields have been populated.

Create a Group Video Visit as a Scheduler (Cont.)

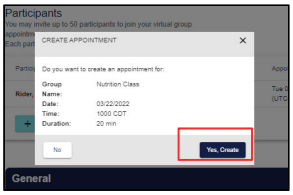
- Provide any additional information in the **Comments** field
  NOTE: *The comments field is only viewable by MTF staff*

- Review the form and click the **Create Video Visit** button



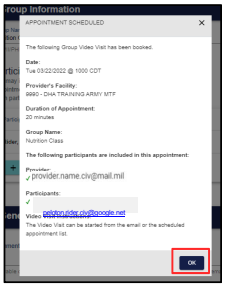
Create a Group Video Visit as a Scheduler (Cont.)

- Review and verify the appointment date, time, and duration
- Click **Yes, Create** to continue
- Selecting **No**, will take you back to Create Video Visit page to edit



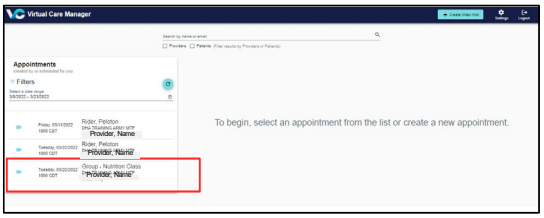
Create a Group Video Visit as a Scheduler (Cont.)

- Review the scheduled appointment information and click **OK**



Create a Group Video Visit as a Scheduler (Cont.)

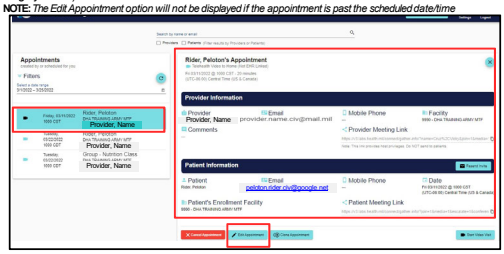
- The new video visit appointment will be displayed



Edit/Resend/Cancel Scheduled Video Visit Appointment

Edit Video Visit Appointment

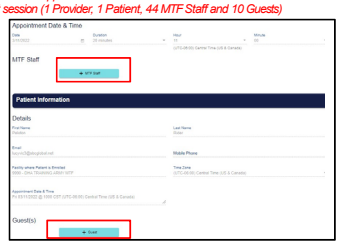
- Click on Patient's video visit appointment. The appointment information will be displayed to the right.
  NOTE: If the appointment to be edited is not displayed search for patient and select date range
- Click **Edit Appointment** to add additional guests/participants and/or staff to existing appointment (*all other fields are grayed out*)
  NOTE: *The Edit Appointment option will not be displayed if the appointment is past the scheduled date/time*



Edit Video Visit Appointment (Cont:)

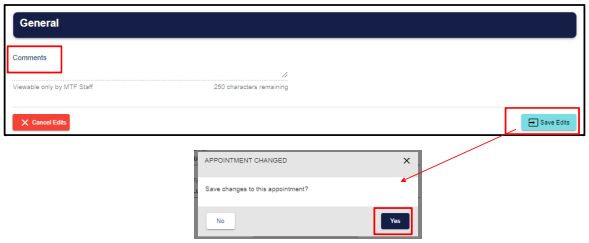
- Add **Guest/Additional MTF Staff**
- Click **Save Edits**

** Single Patient Video Visit Appointment - 10 Guests can be added. A total of 56 individuals can attend a video visit session (1 Provider, 1 Patient, 44 MTF Staff and 10 Guests)*



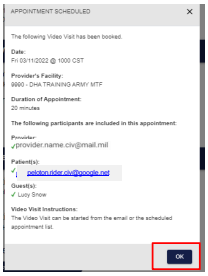
Edit Video Visit Appointment (Cont.)

- Add **Comments**, if needed
- Click **Save Edits.** APPOINTMENT CHANGED pop-up will be displayed.
- Click **Yes** to save changes



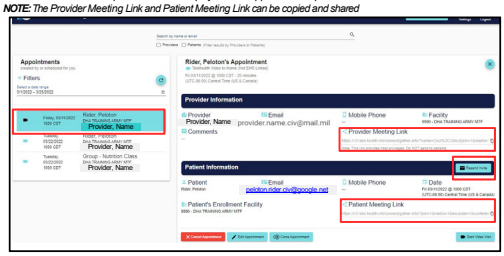
Edit Video Visit Appointment (Cont.)

- Updated Appointment details will be displayed
- Click **OK**



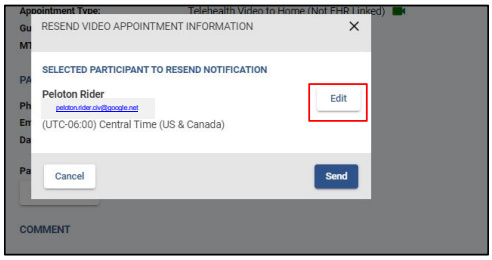
Resend Invite

- Click on **Patient's video visit appointment**. The appointment information will be displayed to the right.
  NOTE: If the appointment, to be edited is not displayed search for patient and select date range
- Click **Resend Invite**
  NOTE: *The Resend Invite option will not be displayed if the appointment is past the scheduled date/time*
  NOTE: *The Provider Meeting Link and Patient Meeting Link can be copied and shared*



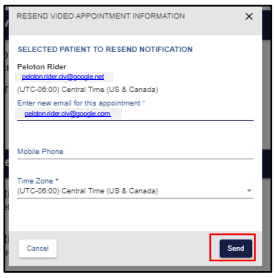
Resend Invite (Cont.)

- Click **Edit**



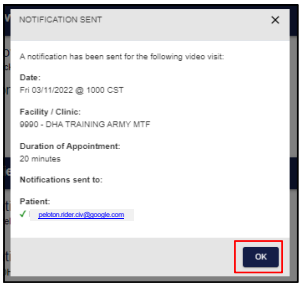
Resend Invite (Cont.)

- Verify **Patient's email** and **Time Zone**
- Click **Send**



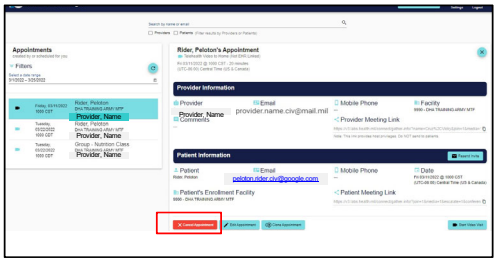
Resend Invite (Cont.)

- Click **OK**



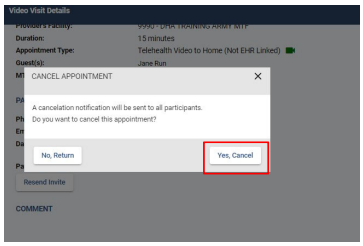
Cancel Appointment

- **Cancel Appointment** can be used to cancel a current video visit appointment



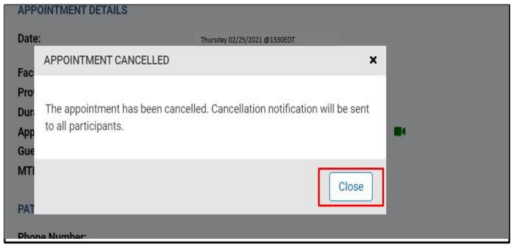
Cancel Appointment (Cont.)

- Cancel Appointment confirmation will be displayed
- Click **Yes, Cancel**



Cancel Appointment (Cont.)

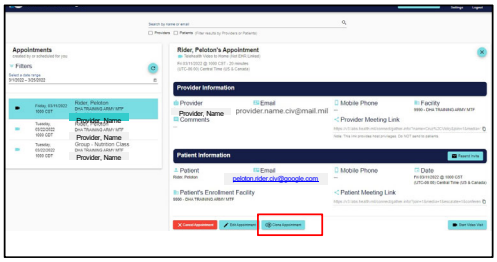
- APPOINTMENT CANCELLED will be displayed.
- Click **Close**



Clone a Video Visit Appointment

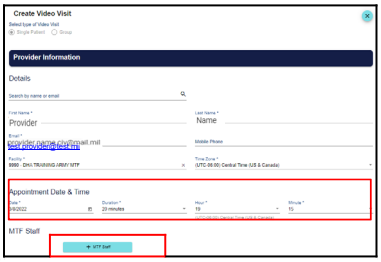
Clone a Video Visit Appointment

- **Click Clone Appointment.** The Create Video Visit pane will be displayed
  NOTE: *Notice the existing appointment date/time is updated with the current date/time*



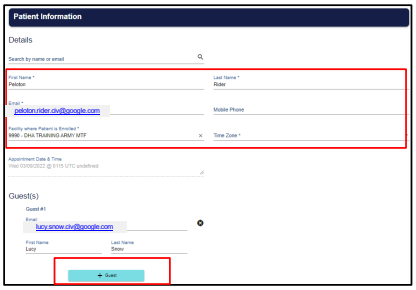
Clone a Video Visit Appointment (Cont.)

- **Verify Provider Information**
- **Change** the **APPOINTMENT DATE & TIME** fields as required
  NOTE: *The appointment date and time will be defaulted to the current date/time*
- **Add/Remove MTF Staff** as required



Clone a Video Visit Appointment (Cont.)

- **Update Patient Information** fields as required



Clone a Video Visit Appointment (Cont.)

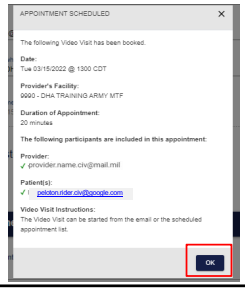
- Provide any additional information in the **Comments** field
  NOTE: *The comments field is only viewable by MTF staff*
- **Click Create Video Visit**. The CREATE APPOINTMENT box will be displayed



Clone a Video Visit Appointment (Cont.)

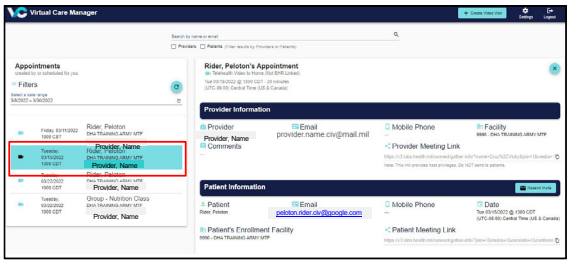
- **Click Yes, Create**
- **Click OK**. The patient's new video visit appointment will be displayed





Clone a Video Visit Appointment (Cont.)

NOTE: *If the Patient's new appointment does not display, check the date range filter to make sure it displays the new (cloned) appointment date range*



Conduct Video Visit

Joining a Video Visit

The Provider can access the video visit by one of the following methods

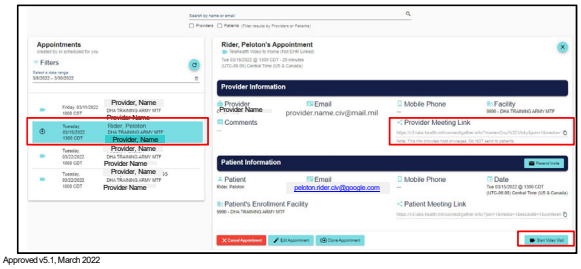
A. Logging into Virtual Care Manager and clicking on the patient waiting "**ONLINE**" or click **Start Video**.

B. Clicking on the embedded **URL** in the appointment email. This will take the provider directly to the "Welcome to MHS Video Connect" prompt.

- **NOTE:** *For this training session we will be joining the video visit by logging into Virtual Care Manager*

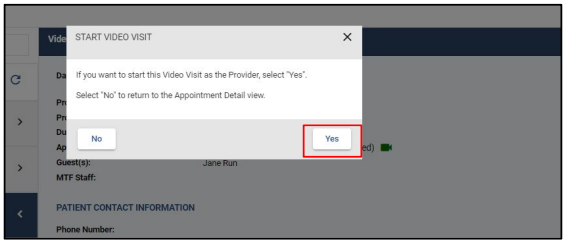
Video Visit (Cont.)

- Locate the **Patient** and click to highlight. The video visit details will be displayed
- **Conference in Progress icon** indicates that the patient is waiting in the virtual room
- Click "**Start Video Visit**" to initiate video visit session or copy Meeting Link and paste into a browser (Google Chrome or Edge)



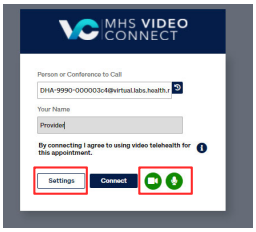
Video Visit (Cont.)

- Click **Yes** from the **Start Video Visit** pop up window



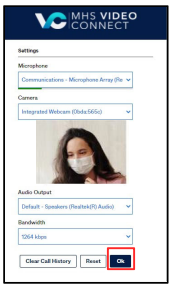
Video Visit (Cont.)

- The green camera icon can be clicked to shut off camera abilities and the green microphone can be used to mute.
  NOTE: *Recommendation is to have camera on and audio unmuted upon entering the session.*
- Click **Settings**



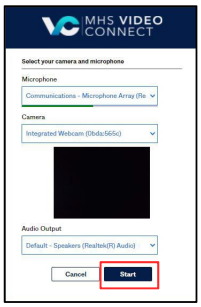
Video Visit (Cont.)

- Verify correct **Microphone, Camera** and **Audio Output** is selected and working properly
- Click **Ok**



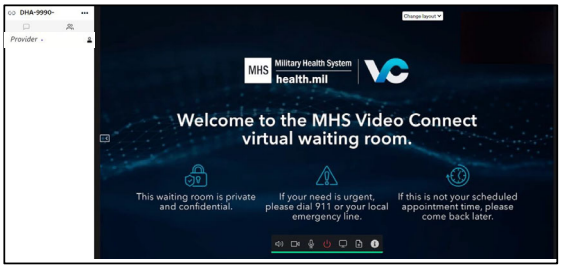
Video Visit (Cont.)

- Click Start



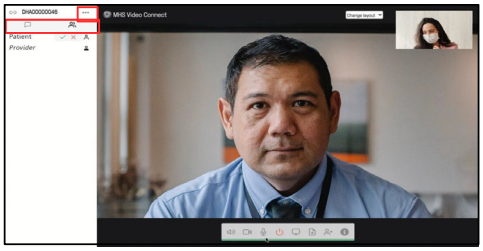
Video Visit (Cont.)

- The provider is now in the **virtual room** waiting for the patient to join



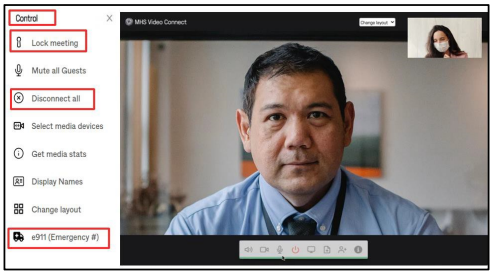
Video Visit (Cont.)

- The patient has joined the video visit session with the provider
- When selecting the **Participants** icon, the occupants currently attending the virtual video visit will appear
- When selecting the **Chat icon**, communication via typing can be done between the clinical team and patient
- The **Ellipses icon**, presents more options available to the video visit for the host



Video Visit (Cont.)

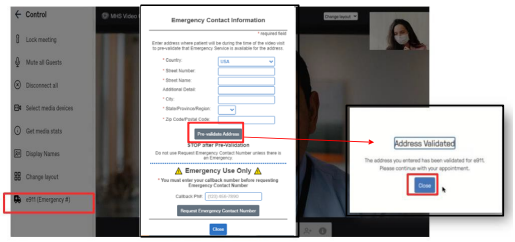
- The **Ellipses** button, when selected, will present a **Control** panel
- More commonly used buttons will be: **Lock meeting** (locks participants from entering when video visit begins), **Disconnect All** (disconnects all guests from the video visit), and **e911 (Emergency #)**



Validating e911 Information

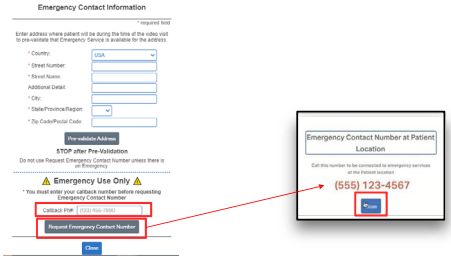
Provider conducting visit will contact 911 on behalf of the patient, if emergency services are needed

- **Select e911 (Emergency #)** from the control options on the left
- Verify patient's physical location at the time of the video visit and click **Pre-validate Address**
  NOTE: *If this information is not completed at the beginning of the visit, it is the provider's responsibility to fill it in*
- Once the patient's location has been validated click **Close** on the Address Validated pop-up.



Verifying Emergency Contact

- The Provider must enter a call back number (**Callback Ph#)** before requesting an Emergency Contact Number
- Click **Request Emergency Contact Number** (Need to write down number before clicking close)
- Click **Close**



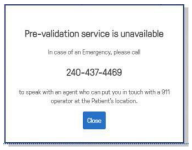
e911 – No valid Patient Address

UNVERIFIED Address or Mobile patient location:

- If no valid address then the e911 call, once initiated by the Provider will be directed to the Emergency Call Relay Center (ECRC)
- The Provider will need to provide the patient location/contact details to the ECRC agent to determine correct 911 transfer point

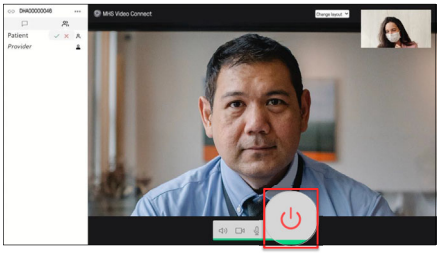
Disconnected (dropped) call with ECRC

- Provider's responsibility to call ECRC back: (240)437-4469
- Provide patient location/contact info to ECRC agent



End Video Visit

- To end the video session both the Host and Patient will select the **Disconnect** button on the menu at the bottom center of the screen
  NOTE: *The host also has the option to Disconnect All*



Resources

All resources below can be found on the **MHS Video Connect milSuite site:**
https://www.milsuite.mil/book/groups/mhs-video-connect/pages/overview

- Peer Expert Training Slide Deck
- Quick Reference Guides
- Flyers for Staff and Beneficiaries
- Workflows (Legacy and MHS GENESIS)
- Trouble Shooting Guide to Assist Patients with MHS VC
- Training Videos
- Competency Assessment Checklists
- And other MHS VC information/materials

Additional staff and patient information can be found on health.mil
https://www.health.mil/Military-Health-Topics/Technology/Connected-Health/MHS-Video-Connect

MHS VC Help

- For any *issues with MHS Video Connect* please contact the Global Service Center (GSC) by one of the following:
  - Phone: 1-800-600-9332 and say MHS Video Connect or MHS VC at the voice prompt

    OR

  - Website: https://dashboard-gsc.health.mil/ to submit a case (Submit a Case>Get help>Create Case) and enter MHS Video Connect in the subject line.

Questions?

Please fill out our survey:
https://survey.vovici.com/se/0460226C08FE7A75

Appendix H: MHS Video Connect Provider Competency Assessment Checklist (5)

Defense Health Agency

MHS Video Connect

(MHS GENESIS Site)

Provider

Competency Assessment Checklist

MHS Video Connect
Competency Assessment Checklist
Version 1.3, October 2021

MHS Video Connect Competency Assessment Checklist

Instructions: This checklist is a multi-purpose tool designed to be utilized by site trainers to verify the competencies have been taught and understood. This checklist should be utilized to check off skills performed by the end-user as they are trained/performed and utilized as a tool for verifying competencies during refresher training.

1. **Competency Trained (Y/N):** Train/Confirm the items listed in this column where trained with approved curriculum/guides.
2. **Performs Independently**: End user can perform this skill with no assistance required.
3. **Performs with Assistance**: End user can perform this skill but requires additional assistance.
4. **Needs Training**: End user cannot perform this skill and requires training.
5. **Comments Column**: Self-explanatory.

MHS Video Connect - Provider
Competency Assessment (Skills Training) Checklist

End User Name_____

MHS Video Connect Competencies		Initial Training	Refresher Training/Training Gap Analysis			
		Competency Trained (Y/N)	Performs Independently	Performs with Assistance	Needs Training	Comments
1	**MHS VC Overview**					
	- Discuss Virtual Health Workflow (MHSG)					
	- Discuss MHS Video Connect Functionality					
	- Discuss MHS Video Connect Benefits					
	- Discuss Privacy and Information Security/HIPAA					
2	**Schedule Video Visit in MHS GENESIS (Revenue Cycle)**					
	- Schedule Video Visit(s)					
3	**MHS Video Connect Account**					
	- Request MHS Video Connect account					
	- Review set-up requirements (Webcam, etc.)					
4	**Manage Video Connect Visit(s)**					
	- Log-in to the Virtual Care Manager					
	- Edit scheduled Video Visits					
	➢ Add Guests (Family members, Caregivers)					
	➢ Add Additional MTF Staff					
	➢ Remove Guests					
	➢ Remove Additional MTF Staff					
	- Resend Video Appointment email					
5	**Prepare for a Video Connect Visit**					
	- Discuss Provider/Clinical Team Responsibilities (check Equip, Environment, etc.)					

MHS Video Connect - Provider
Competency Assessment (Skills Training) Checklist

End User Name_____

MHS Video Connect Competencies		Initial Training	Refresher Training/Training Gap Analysis			
		Competency Trained (Y/N)	Performs Independently	Performs with Assistance	Needs Training	Comments
	- Discuss Patient Responsibilities					
6	**Conduct a Virtual Health Encounter (Video Connect Visit)**					
	- Join scheduled video visit (Email URL)					
	- Check eligibility (confirm 2 patient identifiers)					
	- Confirm patient information (Phone Number, etc.)					
	- Confirm e911 Information (Physical location of patient, etc.)					
	- Lock virtual treatment room					
	- Provide patient copy of end-of-visit/discharge summary (MHSG Patient Portal Messaging)					
	- Document patient visit in EHR/Sign and close encounter					
7	**Troubleshoot/Technical Issues**					
	- Discuss Contingency Plan for technical issues (i.e., Internet connection, initiate new web link if initial scheduled link fails, etc.)					
	- Discuss DHA GSC support for Staff					
8	**Tips & Tricks for MHS Video Visit**					
	- Review Tips & Tricks for Video Visits					

*** Initial/Refresher Training**

- Date Initial Training Conducted:_____
- Date Refresher Training Conducted:_____
- Clinical Information Systems Trainer (FirstName, LastName):_____

MHS Video Connect - Provider
Competency Assessment (Skills Training) Checklist

End User Name_____

Follow-Up Assessment

- Date Follow-Up Assessment Completed: _____
- Date Follow-Up Training Conducted (if applicable): _____
- Clinical Information Systems Trainer (FirstName, LastName):_____

Comments: _____

_____

_____

Appendix I: OPORD 16-27 (22)

HEADQUARTERS, US ARMY MEDICAL COMMAND
Falls Church, VA 220421204
121600R January 2016

OPERATION ORDER 16-27 (ARMY TELE-BEHAVIORAL HEALTH OPERATIONS)

References:

(a) Army Medicine 2020 Campaign Plan, 43rd Surgeon General, United StatesArmy, Version 2, dated 04 March 2013.

(b) MEDCOM Supplement 3 to AR 40-66, Medical Records Administration andHealthcare Documentation, dated 24 October 2011 (TH Informed Consent).

(c) OPERATION ORDER (OPORD) 13-38 (Army Medicine 2020 Campaign PlanGovernance), dated 15 March 2013.

(d) OPERATION ORDER (OPORD) 13-54 (TH Licensure Portability), dated 26 June2013.

(e) OTSG-MEDCOM Policy Memo 15-020, Use of Telehealth in the United StatesArmy MEDCOM, dated 10 April 2015.

(f) OTSG-MEDCOM Policy Memo 14-82, Behavioral Health Direct Patient CarePerformance Guidance for Minimum Capacity, dated 14 October 2014.

(g) MEDCOM OP 45, TH Consent –Authorization to Receive or Record THServices, dated June 2011.

(h) MEDCOM Chief of Staff Policy Memo, Clarification of Credentialing and Privileging Requirements for Providers Who Provide Official Readings of Images, Tracings, or Specimens or Who Provide Only Consultative Advice via Tele-medicalLink, dated 03 June 2013.

(i) FRAGO 5 to OPORD 13-38 (Army Medicine 2020 Campaign Plan Governance),dated 21 November 2014.

(j) Annex A to FRAGO 5 to OPORD 13-38 (TH All-Specialty Standard OperatingProcedures), dated 21 November 2014 (revision in staffing).

(k) FRAGO 12 to OPORD 10-70 (USAMEDCOM Comprehensive Behavioral HealthSystem of Care Campaign Plan), Tele-Behavioral Health Operations Manual, dated 26 April 2012.

(l) TH Policy and Procedures Training Module (https://**army.swankhealth.com/**).

(m) TH Connect and Communicate Training Module (https://**army.swankhealth.com/**).

(n) MEDCOM OPORD 14-26 (Telehealth Integration), dated 17 Jan 2014.

(o) Army Regulation (AR) 40-68, Clinical Quality Management, dated 22 May 2009 (revision in staffing).

(p) MEDCOM Memorandum, Fiscal Year 2017-2021 MEDCOM Performance Planning Guidance, Enclosure 2 Telehealth Performance Planning Guidance, dated 19 Oct 2015.

Time Zone Used Throughout the Order: Romeo (Eastern Standard Time).

Task Organization: No change.

1. **Situation.**

a. As an Army Medicine core clinical capability, Tele-Behavioral Health (TBH) is in the midst of transformation and expansion to optimize care delivery and operations towards a standardized, metrics-driven, and patient-centered platform under an enterprise-level Operating Company Model (OCM). This is in concert with the US Army Medical Command's (MEDCOM) transformation from a healthcare system to a system for health.

b. The MEDCOM Telehealth Service Line (THSL) and the MEDCOM Behavioral Health Service Line (BHSL) are the strategic execution arms of TBH within the OCM. THSL is located in The Office of The Surgeon General (OTSG)/MEDCOM G-3/5/7 (Patient Care Integration). BHSL is located in the OTSG, MEDCOM G-3/5/7 (Health Care Delivery). The MEDCOM G-3/5/7 will direct and sustain the transformation of TBH consistent with the OCM.

c. This OPORD establishes a common end state for TBH service delivery structure and consolidates, standardizes, and synchronizes critical elements of TBH within Regional Health Commands, Provisional (RHCs) (P), enduring Regional Medical Commands (RMC), e.g., Western (WRMC), and Health Readiness Platforms (HRPs). It clarifies the roles and responsibilities of the THSL and BHSL in support of RHC (P) (P) and HRP adoption of the OCM approach within the domains of services supported by TBH.

2. **Mission.** MEDCOM will continue to evolve its TBH capacity and operations to best support the Army Medicine 2020 Campaign Plan.

3. **Execution.**

a. Commander's Intent. RHCs (P) will execute TBH as a core, enduring clinical mission by standardizing best practices in support of MEDCOM's behavioral health (BH) priorities.

b. Concept of the Operation. MEDCOM has successfully grown its TBH capabilities world-wide and shown that TBH, initially a pilot effort, is now an enduring requirement which is used to satisfy medical treatment. There are also additional avenues for TBH transformation and expansion to better support our beneficiaries. To optimize TBH scope and effectiveness with limited resources, MEDCOM must achieve a common end state for TBH service delivery structure.

(1) RHCs (P) execute TBH in their area of operation using OTSG/MEDCOM policy guidance, standardized business processes, and accountability tools from the MEDCOM G-3/5/7. RHC (P) Commanders ensure that the clinical uses of TBH align with the greatest needs of the HRPs within their region while adhering to OTSG/MEDCOM BHSL-Behavioral Health System of Care (BHSOC) and THSL program structures, priorities and standards. Service line coordination and synchronization between BHSL and THSL will be completed prior to the issuance of policy guidance to assure continuity.

(2) RHCs (P) will maintain a TBH capability that offers behavioral healthcare through TBH modalities through a distributed model, which is defined as BH providers in physical BHSOC program clinic structures at the treatment facility level who episodically provide TBH alongside in-person behavioral healthcare. All BH Departments and their clinics have approval to perform TBH in a distributed model and all BH providers are equipped with high-definition desktop video capabilities supported by the United States Army Medical Information Technology Center (USAMITC) with Health Insurance Portability and Accountability Act (HIPAA) and Department of Defense (DoD) information technology security-compliant point-to-point connectivity.

(3) In coordination with (ICW) THSL and BHSL, each RHC (P), excluding WRMC, that will endure as an RHC (P) will maintain one TBH Hub consisting of a team of BH providers and support personnel that offer dedicated behavioral healthcare through TBH modalities. The Hub serves as a tool for the RHC (P) Commander to support the needs of the HRPs as they deliver behavioral healthcare.

(4) Standardized TBH organization includes seven key elements: (a) Naming convention; (b) Functional alignment; (c) Unified leadership; (d) Centralized resource management reporting; (e) Continuous improvement in efficiency and efficacy using standardized operations metrics and a Review and Analysis (R&A) process; (f) Clinical and administrative uses of TBH; and (g) Army TH All Specialty Standard Operating Procedures, Annex A to FRAGO 5 to OPORD 13-38.

(a) Naming convention:

(1) For those RHCs (P) that have dedicated BH resources performing centralized TBH, the centralized organization will be referred to as a "TBH Hub".

(2) All TBH conducted by HRP personnel not assigned to a TBH hub will be called "Distributed TBH". No other naming structure is authorized.

(3) TBH provides BH services to Title 10 and eligible beneficiaries through the use of electronic communications. All such programs will be called "Tele-Behavioral Health programs". No other naming structure is authorized.

(b) Functional Alignment of TBH Hubs:

(1) Each authorized TBH Hub is governed by RHC (P) Clinical Operations and coordinates with the THSL and BHSL at OTSG/MEDCOM. Authorized TBH Hubs are:

(2) Regional Health Command – Central (RHC (P)-C) supported by Brooke Army Medical Center.

(3) Regional Health Command – Pacific (RHC (P)-P) supported by Tripler Army Medical Center.

(4) Regional Health Command – Atlantic (RHC (P)-A) supported by Dwight D. Eisenhower Army Medical Center.

(5) Regional Health Command – Europe (RHC (P)-E) supported by Landstuhl Regional Medical Center and Sembach clinic.

(6) Personnel assigned to TBH Hubs will be affiliated with the supporting HRP for personnel actions, credentialing, and privileging. This facilitates the management processes (e.g., workload accounting, capacity and staffing analyses) that drive TBH standardization across the MEDCOM. However, TBH Hubs are RHC (P) assets and day-to-day operations are governed by the RHC (P).

(7) TBH Hubs are strategic resources and will be used to meet the most significant challenges as detailed below. The supported population will primarily be within the RHC (P)'s area of responsibility, but may include beneficiaries in other RHC (P)s with the agreement of both RHC (P)s.

(c) Unified Leadership:

(1) For those RHC (P)s that have dedicated BH resources performing centralized TBH in a TBH Hub, RHC (P) Commanders will designate a single Chief, TBH Hub, who will manage all TBH activities within the RHC (P) and coordinate with regional TH leadership, THSL and BHSL. Only one Chief, TBH Hub is authorized per RHC (P). The Chief, TBH Hub may be in addition to an overall RHC (P) TH director,

who has purview over all RHC (P) TH operations. Minimum qualifications include but are not limited to the following:

(a) Demonstrated leadership ability with a record of increased levels of responsibility.

(b) Ability to effectively manage resources and execute clinical programs within MEDCOM facilities.

(2) The RHC (P) designee will conduct interviews and/or assess candidates as he/she deems necessary. The Chief, TBH Hub will be the best-qualified officer or civilian regardless of clinical or professional affiliation. The Chief, TBH Hub, either military or civilian, is not an additional manpower authorization, but based upon positions supported in the Distribution Matrix Tool, e.g., BHSL Matrix. Rank and grade of nominees will optimally reflect O-4 to O-6 or Civilians in the grade of GS-13 or above.

(d) Centralized resource management:

(1) Under the guidance of G-8, BHSL ICW THSL will centrally manage all funding for all TBH activities in the MEDCOM, to include funding designated for Army beneficiaries in enhanced multi-service markets (eMSMs). Under the guidance of, G-8, the BHSL will centrally fund all TBH activities in the MEDCOM.

(2) RHC (P)s and HRPs are not authorized to commit resources in excess of their programmed funding in support of expanded TBH efforts. HRPs will address projected funding concerns through the standardized Unfunded Requirements process to MEDCOM G-8 and OTSG/MEDCOM BHSL with regional BHSL endorsement. BHSL and THSL will endorse TBH projects that exceed resourcing levels.

(3) TBH Hub resourcing may be adjusted as single use TBH workload, e.g., “one and done”, is apportioned throughout the MEDCOM.

(e) Continuous improvement in efficiency and efficacy using standardized operations, metrics, and a BHSL-THSL Review and Analysis (R&A) process, which includes, but may not be limited to: TH Regional Analysis, Discussion, and Review (RADaR) and BHSL TBH R&A.

(1) The THSL has published and contributed to numerous policies and guides to ensure continuous improvement in efficiency and efficacy toward an OCM across the MEDCOM. This guidance includes: (i) the all-specialty policy for TH use in the MEDCOM (reference e); (ii) all-specialty TH Standard Operating Procedures (SOP) (reference j); (iii) MEDCOM policy on licensure portability (reference d); (iv) common TH informed consent form and appropriate use (references b and g); (v) policy on TH training for US Army Medical Department (AMEDD) personnel (reference n); (vi) TBH Operations Manual (reference k); (vii) TBH direct patient care standards for minimum capacity (reference f); (viii) clarification of TH credentialing and privileging guidance

(reference h); (ix) FY17-21 MEDCOM Performance Planning Guidance (reference p); and (x) TH quality management guidance (reference o).

(2) Additionally, in coordination with G-8/9, the THSL has rolled-out a web-based business intelligence platform (Tele360) to measure production, efficiency, execution, and effectiveness resulting from adherence to these standards. In coordination with BHSL, the THSL measures TBH clinical outcomes via the BHDP. In coordination with the Army Medical Department Center and School (AMEDDC&S), the THSL developed two standardized, distance-learning training modules for all TH providers (references l and m) and established additional TH training for all incoming AMEDD clinical personnel (reference n).

(3) All policies, training, metrics, evaluations, and other materials supporting an OCM in TH are available via a Common Access Card (CAC)-enabled intranet site to facilitate implementation of TH. The site address is as follows: https://amp.amedd.army.mil/com/tsl/SitePages/Home.aspx. Relevant TBH clinical policies can be found under the "PROGRAMS" tab on the BHSL SharePoint site - https://informatics-sp.mamc.amedd.army.mil/_login/default.aspx?ReturnUrl=%2fsites%2fBHSOC%2f_layouts%2fAuthenticate.aspx%3fSource%3d%252Fsites%252FBHSOC%252Fdefault%252Easpx&Source=%2Fsites%2FBHSOC%2Fdefault%2Easpx (CAC enabled).

(4) TBH Hubs will ensure that all TBH providers and staff comply with all established THSL and BHSL policies and guidance, e.g., OTSG/MEDCOM Policy Memo 14-082: Behavioral Health Direct Care Performance Guidance for Minimum Capacity. The THSL will conduct quarterly Review and Analysis (R&A) with the TBH Hubs as part of an all-specialty TH R&A process to ensure effective and efficient OCM implementation as measured by established dashboards.

(f) Clinical and administrative uses of TBH:

(1) TBH will primarily be used for a defined set of clinical and administrative tasks.

(2) Evaluations required by (DoD), Department of the Army (DA) or MEDCOM regulation. These evaluations generally require a single clinical encounter and include routine assessments required for administrative separations under AR 635-200, special military schools (sniper, recruiting, and drill sergeant), positions of trust and others. The evaluations culminate in a recommendation for clearance or declination which is communicated in a DA Form 3822 and/or via eProfile entry. RHC (P) and HRP commanders will use their TBH Hubs to accomplish these evaluations, as deemed clinically appropriate by BH providers, to maximize available HRP Department of BH providers' clinical time for ongoing and follow-up therapy requiring two or more sessions of behavioral healthcare.

(3) Temporary Duty Retirement List (TDRL) evaluations. These encounters support requests from the Integrated Disability Evaluation System (IDES) team when a BH condition is of sufficient complexity that an opinion is required from a BH provider. TDRL evaluations result in the preparation of a standard report, which is submitted to the appropriate IDES office. To promote standardization of care and optimization of MEDCOM BH provider productivity, all requests from IDES personnel for BH support for these one-time encounters will be routed to the RHC (P)'s TBH Hub. IDES personnel will not directly engage HRP Departments of BH with these requests. This establishes a right of first refusal process for TBH Hubs regarding TDRL cases.

(4) Direct clinical care. TBH can be an effective and efficient method to deliver outpatient behavioral healthcare for all beneficiaries when an HRP's Department of BH cannot meet the clinical demand through the use of local HRP Director of Behavioral Health's) staff. When providing clinical evaluations and follow-on treatment, TBH staff will remain cognizant of the requirement to coordinate with other clinical and non-clinical personnel involved with the patient's care located at the patient's installation, including other BH staff, case managers, primary care teams and Soldiers' commanders. TBH care may also be appropriate for beneficiaries who are geographically dispersed, e.g., not located within 50 miles of a DoD installation/beneficiaries enrolled in TRICARE Prime Remote). TBH is not the modality of choice for acutely suicidal, post-inpatient discharge, or complex clinical patients where face-to-face care for those patients requiring intense clinical attention and close command support coordination is needed to maximize positive outcomes. Any routine application of TBH specifically for this population is not authorized without coordination with OTSG/MEDCOM, G-3/5/7, BHSL.

(5). Provider-to-provider consultation. TBH can effectively provide consultation to other BH and/or medical providers. The Child and Family Behavioral Health System (CAFBHS) specifically leverage TBH in this capacity, but RHCs (P) may apply it in other venues.

(6) Surge support. TBH is especially important when managing events that create emergent time-limited increases in demand for BH providers and/or services. Mass casualty incidents, rapid deployments of large operational units and other events may require leaders to shift BH assets to meet the new demand while providing continuity for beneficiaries already engaged in the BHSOC. The unique challenges presented by each event prohibits the proscription of a single approach to surge support, but TBH can serve critical roles and should be considered when managing traumatic and other significant events. Appendix 4 to the All-Specialty TH Standard Operating Procedures (SOP) (reference j) includes an Emergency Management Annex that provides lessons learned from previous uses of TBH for emergency surge support.

(7) Any other uses of TBH personnel or resources at the RHC (P) or TBH Hub levels require approval from OTSG/MEDCOM G-3/5/7.

(8) Standard Operating Procedures: The authorized SOP for all organizations and providers conducting TBH encounters is found in ANNEX A (Telehealth Service Line Standard Operating Procedures to FRAGO 5 to OPORD 13-38). All RHCs (P) and HRPs conducting TBH must use ANNEX A as a base document and add information to this SOP as prescribed in Appendices 1 and 2 of ANNEX A (Telehealth Service Line Standard Operating Procedures to FRAGO 5 to OPORD 13-38]. This information will be added as an Annex to the base SOP. No other changes to the SOP are authorized.

c. Tasks to Subordinate Units.

(1) RHC (P)-P, RHC (P)-C, RHC (P)-A, and RHC (P)-E will:

(a) During FY16, RHC (P)-A will relocate its TBH Hub from the National Capital Area to Dwight D. Eisenhower Army Medical Center, Ft. Gordon, GA.

(b) Support single TBH encounter concentration at RHC (P) TBH Hubs using Annex A to this OPORD as a guide to code all single, e.g., “one and done”, TBH encounters.

(c) Establish TBH hub as strategic and tactical asset for the region.

(d) Set the strategic objectives and prioritize TBH delivery of services.

(e) Review MEDCOM tasks that require BH provider backfills (e.g., deploying provider) and will leverage TBH to meet requirement whenever possible to eliminate need to task providers out of clinic.

(f) Mitigate issues with HRP access to care and provider shortages and leverage TBH to maximize capacity.

(g) Establish policy on appointment templates that maximize TBH utilization and reduce leakage to network.

(h) Develop policy to task organize staff to most efficiently deliver menu of services and maintain provider availability and productivity.

(i) Develop policy to manage no shows, cancellations, and facility cancels to increase capacity.

(j) Coordinate with other RHC (P)s to provide TBH support when services are unavailable within requesting region (cross regional support).

(k) RHC (P)-P and RHC (P)-C will continue to coordinate to ensure its TBH Hubs support enduring Western RMC HRPs. Plans will endure through full operational capability (FOC) status and include the FOC concept of the TBH operation RHC (P),

TBH Hub leadership and current staffing, current TBH operations, and future TBH operations. Points of contact (POC) for this action within MEDCOM G-3/5/7 are Chief, THSL and Chief, BHSL.

(l) Submit requests to conduct TBH operations outside of the functional areas described above, including initiatives to target complex or acutely suicidal patients, to BHSL, MEDCOM/OTSG G-3/5/7.

(m) Coordinate all TBH pilots before implementation with Chief, THSL, Colleen Rye, PhD at colleen.b.rye.civ@mail.mil and Chief, BHSL, LTC Chris Ivany at christopher.g.ivany.mil@mail.mil. TBH pilots are non-standard initiatives that have received approval from the THSL and BHSL, MEDCOM G-3/5/7 before initiation or use of local funding.

(n) RHC (P) notifies OTSG/MEDCOM, G-3/5/7, in the event of any negative personnel or adverse actions associated with incumbent TBH Hub Chiefs or any loss of TBH capability that threatens mission accomplishment.

(o) Ensure TBH clinical care utilizes the Behavioral Health Data Portal (BHDP) for Active Duty (AD) and AD Family Member patients. For AD patients, providers in TBH Hubs will support requisite coordination of care with the Soldier's leadership through the eProfile system and collaboration with relevant BH organizations responsible for the Soldier's deployment status and behavioral healthcare.

(p) Manage TBH providers IAW productivity and clinical availability standards published in reference f.

(2) Army Public Health Center (Provisional) will:

(a) Coordinate with Chief, BHSL and Chief, THSL to provide program evaluation expertise as needed to support Department of the Army and Department of Defense level evaluation initiatives, such as the Defense Centers of Excellence Program Evaluation and Improvement Initiative.

(b) Coordinate with Chief, BHSL and Chief, THSL to determine on-going priorities for targeted program evaluation support.

d. Tasks to OneStaff.

(1) G-3/5/7 Patient Care Integration.

(a) Chief, THSL will coordinate with the Chief, BHSL to ensure that all metric monitoring and R&As are harmonized for TBH in order to reduce administrative burden on RHC (P)s and HRPs NLT 1 DEC 15.

(b) Chief, THSL will establish a periodic TH R&A process including, but not limited to TBH, to promote continuous improvement in efficiency and efficacy. Such periodic R&A processes may include, but may not be limited to: TH Regional Analysis, Discussion, and Review (RADaR) and BHSL TBH R&A.

(2) G-3/5/7 Health Care Delivery.

(a) Monitor TBH utilization through BHSL R&A process to maximize TBH integration with other clinical delivery platforms.

(b) Establish work group to standardize clinical best practices in TBH evaluation and treatment.

(c) Ensure TBH hub staffing requirements are included in the FY16 Distribution Matrix Tool.

e. Coordinating Instructions.

(1) Acknowledge receipt of this message electronically to MEDCOM OPSCENTER at usarmy.ncr.hqda-otsg.mbx.medcom-ops-center@mail.mil or telephonically at (703) 681-8052 or DSN 761-8052.

4. **Sustainment.** Not used.

5. **Command and Signal.**

a. Command. Normal command relationships remain in effect.

b. Signal. The POCs for this OPORD are Mr. Paul Rivera, Deputy Chief, Telehealth Service Line at (210) 221-7256 or email paul.r.rivera2.civ@mail.mil or Dr Colleen Rye via email at colleen.b.rye.civ@mail.mil and LTC John Yeaw, Chief of Operations, Behavioral Health Service Line at (703) 681-0526 or via email at john.d.yeaw.mil@mail.mil.

ACKNOWLEDGE: OTSG OPSCENTER usarmy.ncr.hqda-otsg.mbx.medcom-ops-center@mail.mil.

WEST
LTG

OFFICIAL:

//original signed//
R. SCOTT DINGLE

Appendix J: OTSG MEDCOM Policy Memo 15-020 (18)

DEPARTMENT OF THE ARMY
HEADQUARTERS, UNITED STATES ARMY MEDICAL COMMAND
2748 WORTH ROAD
JBSA FORT SAM HOUSTON, TX 78234-6000

REPLY TO ATTENTION OF

OTSG/MEDCOM Policy Memo 15-020

1 0 APR 2015

MCHO-CL-C

Expires 10 April 2017

MEMORANDUM FOR Commanders, MEDCOM Regional Medical Commands

SUBJECT: Use of Telehealth in the United States Army Medical Command (MEDCOM)

1. **References:**

   a. **10 USC§ 1094(d) (2010).**

   b. **28 USC§ 1346(b) (2010).**

   c. **Health Insurance Portability and Accountability Act (HIPAA), Public Law 104-191.**

   d. **Department of Defense (DoD) 6025.18-R, DoD Health Information PrivacyRegulation, 24 Jan 03.**

   e. **DoD Directive 6025.18, Privacy of Individually Identifiable Health Information in DoD Health Care Programs, 19 Dec 02.**

   f. **DoD Manual 6025.13, Medical Quality Assurance and Clinical QualityManagement in the Military Health System, 29 Oct 13.**

   g. **DoD Instruction 6025.5, Personal Services Contracts (PSCs) for Health CareProviders (HCPs), 06 Jan 95.**

   h. **MHS Coding Guidance: Professional Services and Specialty Coding Guidelines,Version 3.6, UBU, 1 March 2013, Section 4.2, http://www.tricare.mil/ocfo/bea/ubu/coding_guidelines.cfm.**

   i. **Army Regulation (AR) 40-66, Medical Record Administration and HealthcareDocumentation, 17 Jun 08 (RAR 4 Jan 2010).**

   j. **AR 40-68, Clinical Quality Management, 26 Feb 04 (RAR 22 May 2009).**

   k. **Army Medicine 2020 Campaign Plan, 43rd Surgeon General, United States Army,Version 2 dated 4 Mar 13.**

"This policy supersedes OTSG/MEDOM Policy Memo 13-009, 20 Feb 13, subject as above.

l. MEDCOM Memorandum, Clarification of Credentialing and Privileging Requirements for Providers who Provide Official Readings of Images, Tracings, or Specimens or who Provide only Consultative Advice via Telemedical Link, 03 Jun 13.

m. MEDCOM Supplement 3 to AR 40-66, Medical Record Administration and Healthcare Documentation, 24 Oct 11.

n. MEDCOM Regulation 25-1, Information Management, 10 Jun 04.

o. Annex A (Telehealth Service Line Standard Operating Procedures) to FRAGO 5 to OPORD 13-38 (Army Medicine 2020 Campaign Plan Governance), 21 Nov 14.

p. OPORD 14-26 (Telehealth Integration), 17 Jan 14.

q. OPERATION ORDER (OPORD) 13-54 (Telehealth Licensure Portability Under Section 713 of the 2012 National Defense Authorization Act (NDAA)), 26 Jun 13.

r. Appendix 1 (Tele-Behavioral Health Manual) to Annex Q (Tele-Behavioral Health) to FRAGO 12 to OPORD 10-70 (USAMEDCOM Comprehensive BH System of Care Campaign Plan), 01 May 12.

s. Fragmentary Order (FRAGO) 12 to OPORD 10-70 (USAMEDCOM Comprehensive BH System of Care Campaign Plan), 26 Apr 12.

t. OTSG-MEDCOM Policy Memo 13-010, BH Direct Patient Care Performance Guidance for Minimum Capacity, 22 Feb 13.

u. MEDCOM OP 45, Telehealth Consent –Authorization to Receive or Record Telehealth Services, Jun 11.

v. FY16-20 MEDCOM Performance Planning Guidance (pending publication).

w. The Joint Commission, *2015 Comprehensive Accreditation Manual*, January 2015.

2. Purpose: To state the policy for the use of telehealth services within the MEDCOM.

3. Definitions:

a. Telehealth enables the MEDCOM to deliver clinical services at a distance via electronic communications. In the Military Health System (MHS), telehealth is defined as the use of telecommunications and information technologies to provide health assessment, treatment, diagnosis, intervention, consultation, supervision, education, and information across distances. Sometimes called telemedicine, mobile health

(mHealth), e-care, or telecare, the term telehealth covers a variety of clinical services provided using telecommunications and related technologies. Patient and provider consultations, medical imaging, remote monitoring, and education are all services that can be provided via telehealth. A variety of technologies – including clinical videoconferencing systems, internet-based web platforms, telephones, and secure email – can be used to deliver telehealth services. Overall, telehealth facilitates the distribution of health information, services, and education between providers and/or providers and patients.

b. Synchronous, or real time, telehealth encounters involve interactive, electronic communication exchange in at least two directions in the same time period.

(1) A common type of synchronous encounter is clinical video-teleconferencing.

(2) Clinical video-teleconferencing supports the delivery of health care at a distance via real-time, two-way transmission of digitized video images between two or more locations. Providers and/or providers and patients can exchange medical information for the purpose of obtaining an expert opinion, diagnostic support regarding the care of a patient, direct patient care, or patient and/or provider education.

(3) Utilizing clinical video-teleconferencing, the remote provider may interact directly with patient(s), provider(s), staff member(s)/escort(s), family member(s) and/or other designated representative(s), and/or other entities involved in education.

(4) Clinical video-teleconferencing is accomplished using video-conferencing technologies for provider-to-provider, provider-to-patient, or educational encounters.

c. Asynchronous, or store and forward, telehealth encounters transmit medical images or information in one direction at a time via electronic communications.

(1) Common types of asynchronous services include teleconsultations involving radiology, pathology, cardiology, and dermatology.

(2) Teleconsultation supports the delivery of health care at a distance via the asynchronous transmission of electronic medical information and associated or stand-alone digital images over a secure connection between health care providers for the purpose of obtaining an expert opinion or diagnostic support regarding the care of a patient.

(3) In the process of teleconsultation, the remote provider who is offering the consultation does not interact directly with the patient. The provider prepares and transmits comments, recommendations, or an official interpretation back to the referring provider for their review and consideration.

(4) A teleconsultation is accomplished using web-based technologies, or under special circumstances, using email or secure messaging systems.

(5) A teleconsultation is not a traditional patient referral whereby patient care is transferred to the provider.

4. Proponent: The proponent for this policy is the Telehealth Service Line (THSL), Office of The Surgeon General (OTSG), G 3/5/7 Patient Care Integration (PCI).

5. Responsibilities:

a. RMC Commanders will request telehealth provider support outside their RMC through OTSG Health Care Operations ICW THSL.

b. RMC and Military Treatment Facility (MTF) Command Staff are responsible for the administration and implementation of this telehealth policy.

c. RMC Staff will notify the THSL of all regional telehealth activities through the THSL's Telehealth Leaders Sync teleconference or email to ensure situational awareness for senior leadership.

d. RMC and MTF Command Staff are responsible for developing and implementing telehealth services based on a careful analysis of the business case for such services.

e. MEDCOM health care providers are responsible for maintaining appropriate medical standards when using telehealth to deliver health care services to beneficiaries.

f. US Army Medical Information Technology Center (USAMITC), as a MEDCOM Information Technology (IT) Service Provider, is responsible for the architecture, engineering, integration, technical standards, and support of IT based on telehealth requirements. USAMITC's Video Networking Center (VNC) will leverage its current capability as detailed below to further the proliferation of telehealth throughout the MEDCOM. USAMITC is a Defense Health Agency entity that receives funding from MEDCOM based on fee-for-service. Current capabilities on behalf of MEDCOM include:

(1) Consolidation of MEDCOM RMCs, and Major Subordinate Commands for Service Level Agreements to support telehealth with desk top video.

(2) Coordination of Inter-Service Support Agreements with other entities as required to use VNC video services and capability for video interoperability between agencies for provisioning of telehealth video support, as applicable for DoD, other government agencies, and commercial entities.

(3) Determination of video interoperability requirements, architecture, engineering and subsequent implementation of Internet Protocol Video (IPV) services with comparable services with the Department of Veterans' Affairs (VA).

(4) Procuring, deploying and provisioning of IPV capability for MEDCOM telehealth services.

(5) Provision of audio and video conference bridging for the medical community of interest, as required to support business processes.

(6) Provision of enterprise multipoint audio and video scheduling services (from VNC Scheduling operations).

(7) Provision of hardware and software support through sustainment services such as upgrades and modification, application maintenance, and technical customer support (through VNC Technical Support).

(8) Performance of sustainment activities that include procurement, budgeting and projection of future material/personnel requirements.

(9) Performance of functions associated with being Community of Interest Video Manager for MEDCOM with Defense Information Systems Agency.

(10) Provision of coordination of IT security requirement associate with IPV clinical video teleconferencing within and between Service medical agencies (through USAMITC Medical Network Operations Security Center).

g. When telehealth is utilized, RMC and MTF Commanders will ensure that:

(1) Health care and administrative personnel are trained, knowledgeable, and have the capacity to use telehealth as part of their clinical practice and/or administrative duties. Standardized telehealth training module(s) are required and available on the Swank HealthCare online education platform at https://army.swankhealth.com/. MTF Commanders may establish additional training requirements for telehealth privileged providers.

(2) Performance metrics are collected to support a business case and reported to the MTF and RMC Quality Management Committees and/or Performance Improvement Council. These metrics should at a minimum include those in the THSL Performance Framework. This framework will be posted on the THSL web-based business intelligence platform, Tele360, at https://pasba.army.mil/MEDCOM360/.

(3) The MTF conducts annual reviews of all telehealth activities involving their privileged providers and/or patients as part of their Balanced Score Card requirement.

(4) The MTF conducts a patient site assessment, the MTF uses this assessment to develop emergency management protocols for all clinical telehealth encounters involving patient interaction, and providers and staff involved in telehealth encounters in that MTF's catchment area are familiar with these procedures. At a minimum, protocols will include a clear explanation of roles and responsibilities in emergency situations; determination of outside clinic hours emergency coverage (if any); guidelines for determining at what point other staff and resources should be brought in to help manage emergency situations; and contact information for a list of designated licensed providers, at least one of which will always be positioned and available to respond to a patient in crisis at the patient site MTF. Trained staff members will be available in the immediate area at all times during clinical telehealth encounters to institute emergency management protocols if necessary.

(5) Providers are appropriately licensed, credentialed, privileged, and in compliance with procedures documented in this policy.

(6) Providers code appropriately for all telehealth encounters.

(7) The MTF coordinates with HIPAA privacy officers to validate local protocols before telehealth sessions with patients or involving patient information begins.

h. Coordinating Instructions:

(1) The THSL Chief is responsible for the development and implementation of telehealth policy.

(2) The THSL will conduct a review and revision of this policy memo every two years in order to maintain currency with emerging technology, policy, and newly identified "best practices."

6. Policy:

a. Telehealth is utilized when it augments, expands, or enhances the delivery of health care services across the MEDCOM.

b. The THSL has published and contributed to numerous policies and guides to ensure continuous improvement in efficiency and efficacy toward an OCM across the MEDCOM. Telehealth programs will use THSL guidance in the development and operation of MEDCOM telehealth programs.

(1) Policy and standards guidance includes: (i) all-specialty policy for telehealth use in the MEDCOM (current document); (ii) all-specialty telehealth SOP (Reference 1.o.); (iii) MEDCOM policy on licensure portability (Reference 1.q.); (iv) common telehealth informed consent form and appropriate use (Reference 1.u., Annex D); (v) policy on telehealth training for Army Medical Department (AMEDD) personnel

(Reference 1.p.); (vi) MEDCOM policy on Tele-Behavioral Health (TBH) (Reference 1.s.); (vii) TBH Operations Manual (Reference 1.r.); (viii) TBH direct patient care standards for minimum capacity(Reference 1.t.); (ix) clarification of telehealth credentialing and privileging guidance (Reference 1.l.); (x) FY 16 – 20 TBH Performance Planning guidance (Reference 1.v.); and (xi) telehealth quality management guidance (Reference 1.j.).

(2) Training currently includes two distance learning training modules developed by AMEDD Center and School (noted in paragraph 5.h.(1). Additionally, ICW G 8/9, the THSL has rolled-out a web-based business intelligence platform (Tele360) to measure production, efficiency, execution, and effectiveness resulting from adherence to these standards. Finally, the THSL continues to develop communications materials for dissemination of Army TH updates, lessons learned, and good news stories. Examples include Army TH Connections (quarterly newsletter) and a public internet site (http://armymedicine.mil/Pages/telehealth.aspx).

(3) All policies, training, metrics, evaluations, and other materials for telehealth are available via a CAC-enabled intranet site: https://amp.amedd.army.mil/com/tsl/SitePages/Home.aspx.

c. The analysis of telehealth application utilizes best business practices and procedures to select clinical services and monitor future performance metrics.

d. IT systems involving non-research based uses of telehealth will be brought through the process defined in Reference 1.n.

e. Telehealth training as noted in paragraph 5.h.(1) is mandatory for all providers and staff using telehealth. The telehealth provider will maintain a copy of the telehealth specific training completion certificate in their Provider Activity File (PAF), Competency Assessment File (CAF) and in the provider site credentials file (see AR 40-68). Other telehealth personnel will complete and maintain records in their CAF.

f. Telehealth capabilities can be offered under Resource Sharing Agreements between VA, other DoD Components, and academic universities when supported by a business case analysis. However, before telehealth services are exchanged outside of Army MEDCOM, a formal written agreement coordinated with the THSL before signature is required. At a minimum, this agreement must cover credentialing and privileging, licensure, informed consent, patient safety, and malpractice coverage (as necessary).

g. Telehealth encounters with a patient can be considered clinical or preclinical/ administrative. If a licensed provider makes clinical determinations as a result of a telehealth encounter, then this constitutes the practice of medicine and/or the practice of a specialty (e.g., in the case of psychologists). As a result, the telehealth encounter will be considered a "clinical encounter". Examples include tele-psychiatry, tele-psychology,

tele-neurosurgery, and tele-Temporary Disability Retired List determinations. If a provider does not need to be licensed to perform a service, or if clinical determinations are not made as a result of a telehealth encounter, then this does not constitute the practice of medicine or the practice of a specialty. As a result, the telehealth encounter will be considered a "preclinical encounter". An example includes general patient education (non-personalized). For clinical encounters, providers must abide by the licensure, credentialing, and privileging regulations as summarized in this policy. Additionally, if a clinical determination is made, then the encounter is required to be coded in AHLTA and should be coded with a telehealth modifier.

h. Some telehealth services are considered clinical for licensure and preclinical/ administrative for credentialing and privileging. One example is tele-Medical Evaluation Boards (tele-MEB) to include the writing of the narrative summary. Tele-MEB is considered a clinical telehealth encounter from the perspective of state medical boards and administrative from the perspective of the DoD and for the purposes of credentialing and privileging (Reference 1.w.). Quality Management Division, Office of the MEDCOM Staff Judge Advocate, and the THSL can de-conflict use cases for telehealth users to ensure compliance with regulation and accreditation policy.

i. TBH is an important component of Army Telehealth. In turn, TBH as a means of providing traditional behavioral health (BH) encounters or as an adjunct capability for providing surge BH support is a valuable tool in providing BH capability throughout the MEDCOM. To enhance the capability of BH providers across the MEDCOM to participate in TBH operations, all MEDCOM BH providers must have ready access to clinical video-teleconferencing facilities and/or clinical video-teleconferencing equipment. Such access will include internet protocol desktop clinical video-teleconferencing equipment and local HIPAA-compliant video-teleconferencing facilities.

7. Procedures:

a. Medical Documentation.

(1) All medical information generated in the delivery of telehealth will be properly documented and archived in the medical record. (Reference 1.j.). Telehealth encounters should be documented on an SF513 (Consultation Sheet), an approved substitute form that it is scanned into HAIMS, or in AHLTA. For tele-radiology, the SF 519 (Radiographic Report) scanned into HAIMS, or AHLTA are used. Telehealth encounters must meet the same documentation requirements as face-to-face encounters (Reference 1.i.).

(2) In general, providers should archive medical information in HAIMS wherever possible. Paper-based records or other alternative information systems are used in cases where AHLTA is not available or does not permit the provider to fully document a synchronous or asynchronous encounter (both data and digital images).

(3) Medical information generated from telehealth is part of the medical record in the facility rendering the service to the patient.

(4) Tele-radiology uses archive images in Picture Archiving and Communications Systems.

b. Workload Accounting and Coding:

(1) The Unified Biostatistical Utility (UBU) Office at HA originally approved workload accounting and coding guidance in July 2006. Official telehealth coding guidelines can be found in the updated MHS Coding Guidance from March 2013 (Reference 1.h). Man-hour coding guidance can be found in DoD 6010.13-M or at the MEPRS Information Portal: https://www.meprs.info/.

(2) MHS Coding Guidance defines the originating site as the location where the patient is at the time service is furnished. It also defines the remote (distant) site as the location where the consultant is at the time the service is furnished.

(3) Staffing models are based upon relative value unit workload, Graduate Medical Education, and established oversight functions. Therefore, it is imperative that proper documentation and coding of episodes of care be completed so as to continue to generate sufficient manpower requirements to meet the needs of our patients via telehealth.

(4) Workload credit and labor reporting associated with telehealth will be reported as follows:

(a) When the patient is present, the distant provider (Skill type 1 or 2,) who is actually providing the service, will receive credit for the encounter/visit.

(b) When there is a provider (Skill Types 1 or 2) physically present during the encounter, both the (originating and remote [distant]) provider will receive credit for the encounter (as long as documentation supports their services).

(c) Workload and the man-hours of both providers are reported against the work center where the care was provided. In both scenarios, both providers must document the care in AHLTA.

(5) Providers use the following modifiers to code for telehealth (Reference 1.h). See Annex A for a sample coding scenario):

(a) Currently, use of the "GT" modifier with a Current Procedural Terminology (CPT) code and/or Evaluation & Management (E&M) code signifies that synchronous, real-time communication between the distant site physician or practitioner occurred with the patient present and participating in the telehealth visit.

(b) Use of the "GQ" modifier signifies that the distant site physician or practitioner certifies that the asynchronous medical file was collected and transmitted to him/her at his or her distant site from an eligible originating site when the telehealth service was furnished.

(c) When a provider at a distant site provides an interpretation and report of a diagnostic study (e.g., laboratory or radiology test), the service is reported with the -26 modifier for the professional component of the procedure. The originating site would report the procedure with the *–TC* modifier if no interpretation and report are rendered.

c. Credentialing and Privileging:

(1) AR 40-68, Clinical Quality Management (Reference 1.j.) and standards of The Joint Commission (TJC) are supported in all telehealth programs. AR 40-68 supersedes other/local policy and procedure. All providers must comply with these regulations and be credentialed and privileged accordingly before conducting clinical telehealth encounters.

(2) Providers who write orders or direct care/treatment/services via telemedicine must be privileged by the facility receiving the service. The Interfacility Credentials Transfer Brief (ICTB) and a copy of the delineation of privileges will be submitted to the privileging MTF; privileges will be granted only for the services to be rendered via telehealth. Types of services that require privileges include, but are not limited to, those which involve video-teleconference or other direct interactions between patient and provider (Reference 1.j.). See Annex B for a flow chart explicating privileging obligations in commonly encountered telehealth use cases.

(3) Providers who render official readings of images, tracings, or specimens require privileges at the originating site. The receiving MTF can accept the credentialing and privileging decisions of another facility under certain circumstances. When using the services of providers from a Joint Commission-accredited ambulatory care organization through a telemedical link for interpretive services, the hospital can accept the credentialing and privileging decisions of another Joint Commission-accredited provider only after confirming that those decisions are made using the process described in TJC Standards. As it relates to Joint Commissioned-accredited Army MTFs, when the receiving site obtains and maintains a copy of the ICTB and delineation of privileges from the provider's MTF of assignment, they are in effect "privileging by policy." A new privileging process at the receiving site is not required for the provider rendering the service from another Joint Commission-accredited MTF (Reference 1.l.). Examples of these types of services include, but are not limited to, tele-radiology (except mammography for which there are additional requirements), tele-echocardiography, tele-pathology, and store-and-forward dermatology (Reference 1.j.).

d. Informed Consent for Telehealth:

(1) Per AR 40-68, Clinical Quality Management (Reference 1.j.), telemedicine encounters require written informed patient consent before the use of said technology.

(2) MEDCOM Supplement 3 to AR 40-66, Medical Record Administration and Healthcare Documentation (Reference 1.m.), further governs the use of informed consent for clinical telehealth encounters. Specifically, for synchronous clinical telemedicine encounters with a patient, MEDCOM Overprint (OP) 45 will be used to meet the telehealth authorization for counseling and/or for inpatient /outpatient medical/dental care (Reference 1.u., Annex D). MEDCOM OP 45 does not replace State-mandated telemedicine consent forms or OF 522 (Medical Record-Request for Administration of Anesthesia and for Performance of Operations and Other Procedures) requirements for portions of the encounter that do not involve telemedicine. For example, a clinical provider-patient synchronous encounter via telemedicine would require a patient to be given a MEDCOM OP 45 and any other requirements as needed for that specialty (e.g., OF 522 for surgical procedures). Local consent forms will not be used in place of MEDCOM OP 45. An electronic form containing the data elements of MEDCOM OP 45 may be used. Providers will be aware of and follow obligations to verbally consent patients as well.

(3) If a telemedicine encounter with a patient is videotaped, then consent will also be recorded on MEDCOM OP 45. In most cases, the only reason to consider recording the health care episode is to capture information that has compelling educational value. Written informed consent is not required if the video-capture is for the documentation of negligence or abuse (Reference 1.i., Reference 1.m.).

(4) Clinic staff should scan informed consent into the electronic medical record using HAIMS.

e. Regulatory Compliance.

(1) Licensure: Licensure regulations in MEDCOM telehealth are governed by 10 USC § 1094(d) (Reference 1.a.) and DoDM 6025.13 (Reference 1.f.). Section 713 of the 2012 National Defense Authorization Act included language, commonly known as the Servicemembers' Telemedicine and E-Health Portability (STEP) Act, that amends 10 USC § 1094(d) to expand licensure portability for certain providers in U.S. jurisdictions. Guidance on licensure is outlined in OPORD 13-54 and Fragmentary Order 5 to OPORD 13-54 (Reference 1.q.). The OPORD allows MEDCOM to expand the categories of providers that receive licensure portability across state lines IAW Section 713 of the 2012 NDAA as circumscribed by DoDM 6025.13 IOT enable expanded access to care to its patient population and the additional requirements for telemedicine. See Annex C for flowcharts explicating current licensure obligations in commonly encountered telehealth use cases.

(2) Malpractice: Malpractice regulations in MEDCOM telehealth are governed by 28 USC § 1346(b) (2010), the Federal Tort Claims Act (FTCA) (Reference 1.b.). See

Annex C for flowcharts explicating coverage under the FTCA in commonly encountered telehealth use cases.

(3) HIPAA: Any patient information associated with telehealth, in either electronic or paper format, is subject to current HIPAA standards (References 1.c., 1.d., and 1.e.). Telehealth programs must comply with HIPAA Transactions and Code Set Identifier, Privacy and Security Standards as they evolve. MTFs must coordinate with HIPAA privacy officers to validate local protocols for telehealth sessions involving patient information before telehealth sessions begin.

8. Measures of Compliance and Effectiveness:

a. All elements of this policy are binding. Further, many sections summarize higher level policy and directives such as federal law or DoD regulation with which appropriate stakeholders are required to be compliant and for which those entities issuing the regulation are under separate obligation to enforce. For example, state medical boards may separately enforce medical licensure regulations, and non-compliance could carry the risk of jail time, fines, and/or actions against a provider's medical license.

b. Outside of these higher-level binding obligations, for the purposes of being deemed in minimum compliance with this policy in future MEDCOM inspections, note that a smaller number of measures could be assessed by appropriate MEDCOM/RMC staff, including but not limited to the following:

(1) Emergency management procedures. The MTF has developed and disseminated emergency management protocols for synchronous clinical telehealth encounters involving patient interaction, as assessed by inclusion of minimum categories described in paragraph 5.h.(4) and documented dissemination of protocols to telehealth providers. There shall be 100% compliance regarding all stipulations included in paragraph 5.h.(4) of this policy.

(2) Training. One Hundred percent of providers privileged at an MTF for telehealth have completed required MEDCOM telehealth training, as assessed through random sampling of telehealth providers' PAF/CAF.

(3) Workload Accounting and Coding. Seventy-five percent of a random sample of encounters conducted by providers located at the MTF are coded in AHLTA using the correct GT or GQ modifier, as assessed by chart review or other appropriate methods.

(4) Credentialing and Privileging. One Hundred percent of providers conducting clinical telehealth encounters via video-teleconferencing must be privileged according to use cases put forth in Annex B, as assessed by checking privileging of providers for a random sample of encounters coded with a GT modifier.

(5) Informed Consent. One Hundred percent of patients at an MTF participating in synchronous clinical telehealth encounters must have a signed copy of MEDCOM OP 45 scanned into HAIMS, as assessed through review of a random sample of patient charts.

(6) Licensure. One Hundred percent of providers conducting clinical telehealth encounters must be licensed according to use cases put forth in Annex C, as assessed by checking licensure of providers privileged at an MTF for a random sample of telehealth encounters and teleconsultations.

(7) Malpractice. One Hundred percent of non-personal services contractors privileged for telehealth must maintain appropriate malpractice insurance that specifically includes telemedicine coverage, as assessed through a random sampling of these providers and subsequent review of the sample's credentials files.

FOR THE COMMANDER:

[redacted]

ULDRIC L. FIORE, JR.
Chief of Staff

4 Encls
1. Annex A
2. Annex B
3. Annex C
4. Annex D

Appendix K: Redesigning Care (1)

REDESIGNING CARE

A How-To Guide for Hospitals and Health Systems Seeking to Implement, Strengthen and Sustain Telebehavioral Health



NATIONAL QUALITY FORUM

AHA CENTER FOR HEALTH INNOVATION

Success Factor 1: Leadership Commitment

Strong and committed leadership that champions the use of telebehavioral health is essential to successfully implementing and sustaining telebehavioral programs.

Key Takeaways:

- Build an organizational culture that welcomes innovation and technology to support implementation efforts.
- Get buy-in from leaders at all levels, including the board of directors, health system executives, service line directors, and clinical and operational team leaders.
- Ask that leaders demonstrate a commitment to improving access to and quality of behavioral health care through integration of telehealth solutions across the system of care by:
  - supporting telebehavioral health as a supplement and an alternative to in-person care, and
  - offering the right types of support and incentives to clinicians and patients for using telebehavioral health services.
- Help drive and sustain implementation efforts by recognizing the potential for telebehavioral health to:
  - increase timely access to appropriate behavioral health care,
  - improve outcomes,
  - decrease costs,
  - create a new revenue stream, and
  - ensure hospital and health system sustainability.
- Invest time and resources into planning, implementing and integrating telebehavioral health throughout the system.
- Consider not only the business model but also the financial and operational staffing model for telebehavioral health within their own context.

Implementation Strategies

STARTING OUT

- Identify what optimal care and patient experience are, regardless of setting or modality
- Determine the purpose and goals of implementing telebehavioral health and align the value proposition for telebehavioral health with the organizational mission and strategic plan
- Identify the organization's and patients' biggest pain points in behavioral health (e.g., ED staff burnout, patient lack of transportation) and use these as potential areas to explore where to start the telebehavioral health service
- Emphasize how telebehavioral health services address quality, cost, and patient and clinician experience
- Identify and define the target population(s) that will benefit from telebehavioral health
- Demonstrate return on investment (ROI) through proof of concepts and small tests of change
- Engage multistakeholders, including a clinical and administrative champion, in building the business case for telebehavioral health integration across the system of care
- Promote grassroots initiatives and early adopters within the health system to implement telebehavioral health
- Understand the potential business models (see **Table 1**) for telebehavioral health, and identify which model best fits the needs of the organization
- Develop the business case for implementing telebehavioral health for a single service line, detailing need and demand, infrastructure and workforce, levels and hours required for training,

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billing procedures and rates, and funding mechanisms

- Dedicate a multidisciplinary team, including a project manager, quality improvement leaders, IT leaders, clinical leads and an executive sponsor, to develop and implement the startup telebehavioral health plan
- Set priorities and targets for telebehavioral health adoption and use across service lines and sites

STRENGTHENING AND SUSTAINING

- Hire leaders at the C-suite who have expertise in behavioral health and telehealth implementation
- Ensure adequate staffing resources are dedicated to sustaining the program
- Centralize operations for the telebehavioral health program to realize efficiencies in administrative and operational functions
- Scale up from pilots or single service lines to other service lines (e.g., general medicine) and sites (e.g., ED) to design a system of care in which telebehavioral health is embedded
- Invest in centralized infrastructure and resources, such as schedulers, trainers and other administrative and operational-focused staff, to enhance capabilities and streamline adoption of telebehavioral health systemwide
- Dedicate resources for IT infrastructure, monitoring, continuous quality improvement and patient satisfaction with telebehavioral health services
- Establish recognition and/or financial incentives for staff, clinical leaders and service lines to promote the use of telebehavioral health
- Test approaches to use telebehavioral health as an alternative to in-person care to meet patient needs (e.g., close clinic to in-person visits for a set time each week to focus on telebehavioral health services)
- Share stories of successes, failures and lessons learned across service lines and settings and with other health systems and hospitals, to encourage and support continuous quality improvement
- Create mechanisms such as organizational reporting to hold service lines and sites accountable for meeting priorities and targets for telebehavioral health use
- Set performance expectations for the percentage of time devoted to virtual care
- Explore integration of direct-to-consumer mobile applications as a next step in the evolution of the telebehavioral health program

Potential Barriers and Suggested Solutions

Lack of resources or limited budgets

Suggested Solutions

- Integrate telebehavioral health into service lines that generate revenue, or seek ways to implement in value-based care or shared savings programs
- Emphasize how telebehavioral health can help differentiate the organization from competitors, lead to new consumer acquisition, and retain top talent through flexible work arrangements
- Identify and apply for grants to support startup costs, including co-investment with payers to support telebehavioral health implementation
- Use a small-scale pilot or proof of concept to demonstrate ROI
- Explore lower-cost software-based technology that works within the existing IT infrastructure and still meets security guidelines, rather than investing in new hardware
- Highlight the potential to address workforce shortages through access to an array of mental health professionals since behavioral health practitioners can work under many different types of licenses, such as licensed clinical social worker (LCSW), doctor of psychology (PsyD), peer counselor, psychiatric and mental health nurse practitioner
- Identify potential partners that can share already established resources or invest jointly in new structures for delivering telebehavioral health services
- Emphasize cost savings achieved through reducing clinician travel and brick-and-mortar overhead costs

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Leadership lacks the appetite for change

Suggested Solutions

- Create a burning platform for change by emphasizing that the status quo is unacceptable and communicating an inspiring vision for the future that aligns with the existing strategic plan
- Educate hospital and health system trustees on the importance of behavioral health and engage them in the shift to telebehavioral health services
- Review organizational actuarial malpractice data to understand differences, if any, between risks of using virtual versus in-person behavioral health services
- Share qualitative data on exceptional clinician and patient experiences, such as patient testimonials about the benefits of using telebehavioral health services
- Provide leaders with data on value of telebehavioral health such as decreased costs of care, particularly for chronic illness management, reduced ED utilization, enhanced market share and improved patient and clinician experience
- Communicate the alternative: consumers and patients may not receive the care they need without telebehavioral health
- Describe lost opportunity costs of not offering telebehavioral health to patients who are increasingly demanding easy and convenient access to services

Lack of leadership and clinician understanding or discomfort with federal and state policies and regulations (e.g., 42 Code of Federal Regulations [CFR] Part 2)

Suggested Solutions

- Understand the actual policy and regulatory requirements specific to providing virtual care and telebehavioral health services by the organization and within the state (see Resources on Legislation, Regulations and Policies next page)
- Partner with other organizations and tap into consumer demand to advocate for changes to policy on a national or state level
- Consult regional and/or national telehealth resource centers to increase understanding of applicable state and federal policies
- Develop a Part 2 consent registry to manage consent and provider access

Suggested Tools and Resources

Tools to Support Business Case Development

- American Medical Association Digital Health Implementation Playbook Step 5: Making the Case
- California Telehealth Resource Center, Sustainability Worksheet to Assist Business Development (Excel)
- Proforma Tool to Build a Sample Business Case for Behavioral Health Integration
- Telebehavioral Health Care: A Solution to Improve Cost, Access, and Quality of Care

Telebehavioral Health and Telehealth Startup Toolkits

- American Medical Association Digital Health Implementation Playbook
- APA and ATA Best Practices in Videoconferencing-Based Telemental Health April 2018
- California Telehealth Resource Center, Telehealth Program Developer Kit
- California Telehealth Resource Center, Best Practices
- Conducting a Telehealth Needs Assessment
- Indian Health Service Telebehavioral Health Center of Excellence Step-By-Step Guide for Setting Up Telebehavioral Health Services
- SAMHSA-HRSA Center Telebehavioral Health Training and Technical Assistance Series
- Telehealth Needs and Organizational Readiness Guide
- Telligen and gpTRAC Telehealth Start-Up and Resource Guide

Literature Supporting the Business Case for Telebehavioral Health

- Exploring the Business Case for Children's Telebehavioral Health

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- Milliman American Psychiatric Association Report, Economic Impact of Integrated Medical-Behavioral Health Care
- Telebehavioral Health: The ROI for Long-Term Care
- Telemental Health Care, an Effective Alternative to Conventional Mental Care: a Systematic Review

Resources on the Value of Behavioral Health Care and Telehealth

- AHA Fact Sheet: Telehealth
- AHA Issue Brief on Telehealth: Helping Hospitals Deliver Cost-Effective Care
- AHA TrendWatch: Bringing Behavioral Health into the Care Continuum

Resources on Legislation, Regulations and Policies

- AHA TrendWatch: Realizing the Promise of Telehealth – Understanding the Legal and Regulatory Challenges
- Center for Connected Health Policy Tools
- CMS Rules for Telehealth Services
- Improving Behavioral Health Access & Integration Using Telehealth & Teleconsultation: A Health Care System for the 21st Century
- Health Resources and Services Administration (HRSA) Telehealth Compendium
- Regional Telehealth Resource Centers

Taking Action

What would be/is the purpose of our program?

What are our biggest pain points that telebehavioral health could help us solve?

What business models might work in our context?

Whom do we need to involve in business planning?

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Table 1: Potential Business Models for Telebehavioral Health

The National Council for Behavioral Health and the Substance Abuse and Mental Health Services Administration have previously described three potential business models for telebehavioral health services, outlined below.[17] Hospitals and health systems may employ a combination of these models when implementing their telebehavioral health programs.

Model Type	Hub & Spoke	Site-to-Site Within a Health System	Direct Remote Specialist Hiring
Description	Hospital or health system partners with remote specialists at a different hospital or health system.	Hospital or health system uses their own specialists to provide services virtually.	Hospital or health system recruits behavioral health specialists from any location, either directly or through a third-party recruiting or staffing company.
Patient location	Originating site or spoke site (e.g., rural hospital) schedules the telebehavioral health visit and hosts the patient on-site. Remote specialist at hub site evaluates or treats the patient via technology.	Site where the patient is located schedules the telebehavioral health visit and hosts the patient on-site. Remote specialist evaluates or treats the patient via technology.	Remote specialist evaluates or treats the patient via technology. Patient need not be present at the hospital or health system.
Payment Considerations	Standard professional fee payment goes to the specialist at the remote site, and originating site where patient is seen receives a facility fee.	Facility fees are potentially excluded.	"Undefined" under Medicare and some Medicaid programs, meaning it complies with applicable regulations but may not be what the law intended.
Challenges	Potential payer-mix challenges and patient no-shows.	Requires an existing workforce with capacity to evaluate and treat additional patients.	Need to ensure remote specialists are licensed in the state where the patient is located.
Benefits	Able to treat more patients and provide greater access to more timely care.	Reduces clinicians' travel time across sites, leading to increased capacity and efficiency within the system.	Retains clinicians if they move, so supports continuity of care and relationship building with patients and care teams.

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Success Factor 2:
Organizational Policies and Clinical Workflows

Engaging all stakeholders in developing organizational policies and clinical workflows will support the implementation, uptake and continued use of telebehavioral health and encourage innovative use of technology.

To support telebehavioral health implementation and sustainability, at a minimum, organizational policies should address: 1) information technology (IT), 2) staffing (e.g., credentialing) and multidisciplinary care, and 3) patient care protocols.

Key Takeaways:

- Ensure that new and existing policies do not exclude telebehavioral health services by implying that patients only receive care in a brick-and-mortar setting. However, policies will need to address considerations for the physical environment where clinicians provide and patients receive care.
- In organizational policies, do not hold telebehavioral health to a different standard than in-person care, and ensure policies support clinicians to work at the top of their licenses.
- Make sure policies address interpretations of external regulations and coverage requirements to clarify organizational expectations and provide clear direction to staff.
- When multistakeholder groups with broad representation design clinical workflows, tailor workflows to the local context and take into account available community resources; they can help embed telebehavioral health into the system of care.
- Integrate workflows into the electronic health record (EHR) to help to ensure telebehavioral health is scalable across the organization.

Implementation Strategies

STARTING OUT

- Engage front-line clinician and staff champions, patients and caregivers in the initial development of policies and workflows to increase buy-in and understand barriers and unintended consequences of policies
- Engage in-house experts and external consultants for areas where specific expertise is needed to develop policies (e.g., clinical software, security, documentation, privacy)
- Integrate and codevelop policies with IT and related departments, recognizing that policies do not need to start in the IT department and can be developed simultaneously
- Ensure there are policies in place to address issues that would have traditionally been addressed through physical location of behavioral health care (e.g., potential violence, crisis care)
- Lay out physical space considerations for specific target populations (e.g., sitters, volume and noise adjustments for psychiatric patient populations)
- Understand how telebehavioral health scales up and scales down, and what type of technology solution is right for the organization
- Begin the credentialing and privileging process early to ensure clinicians can legally practice within your facility
- Use "proxy credentialing" to rely on information from another hospital or health system in making credentialing decisions and thus reduce the administrative burden of this process
- Convene representatives from across the organization—including legal, finance, clinical departments—and an executive sponsor with a can-do attitude, to develop and implement policies
- Talk to as many people as possible within the hospital/health system and field prior to

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developing a request for proposal (RFP) or having discussions with vendors

- Design workflows to achieve programmatic objectives that align with the hospital's or health system's overall business and service delivery objectives
- Ensure workflows are designed in-house; only consult with vendors in an advisory role on how they have seen others incorporate technology into workflows

STRENGTHENING AND SUSTAINING

- Dedicate a team of clinical staff and operational stakeholders (e.g., legal, compliance) to review and refine policies and workflows
- Engage patients and families in ongoing policy review and evaluation to protect against negative unintended consequences
- Develop policies on compensation and payment for synchronous and asynchronous modalities
- Implement a policy to require proxy credentialing as the default for telebehavioral health
- Standardize use of telehealth follow-up actions when individuals drop out of care or are at risk of lost to follow-up (e.g., text messages, peer support social networks, instant messaging)
- Align clinician compensation with strategic goals to ensure that clinicians are not penalized for providing virtual rather than in-person behavioral health services
- Ensure clinical policies and/or protocols address appropriate handoffs between telebehavioral health and other care settings
- Challenge current processes and workflows by thinking about how technology can enhance or improve them, rather than simply embedding technology into current workflows
- Integrate workflows into EHRs to support data collection, increase productivity and reduce burden
- Ensure policies and workflows emphasize multidisciplinary care teams to support clinicians practicing at the top of their licenses and achieve potential cost-savings through using lower cost care
- Address cybersecurity issues within the organization and work with external partners to ensure they have robust cybersecurity policies in place
- Proactively identify process and outcome data to collect in piloting the workflow to inform care delivery and demonstrate workflow effectiveness
- Explore the use of artificial intelligence and machine learning to help identify how best to move patients through the system of care

Potential Barriers and Suggested Solutions

Lack of support for organizational change

Suggested Solutions

- Build telebehavioral health into the organization's health care access strategy and align workflow to organizational strategy and vision
- Engage board of directors and/or trustees to obtain top-down support for the program
- Emphasize ROI and that patients lost to follow-up will go elsewhere for services or not get the care they need
- Obtain buy-in from front-line clinicians and work upward to administrators and executives
- Share stories of how telebehavioral health was used to care for patients and maximize clinician time and expertise

Inconsistent policies and practices across the organization

Suggested Solutions

- Convene leaders and champions from across the organization to agree on policy and workflow requirements
- Obtain buy-in from necessary stakeholders and create governance structures for policy development and review
- Clarify organizational goals and desired outcomes, and review policies to ensure alignment, relevance and currency
- Conduct a readiness assessment to identify areas where policies need to be strengthened or aligned
-

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- Develop protocols for policy and workflow review and revisions
- Standardize processes for using telebehavioral health across the organization, care settings, services lines and sites; share standard processes with external partners as appropriate

Historic lack of understanding of behavioral health by leadership, clinicians and staff within the hospital or health system

Suggested Solutions

- Raise awareness of the value of behavioral health by disseminating white papers, sharing compelling patient stories, and communicating improved patient and system outcomes associated with both behavioral and telebehavioral health
- Educate staff on the intersection of behavioral health and chronic conditions
- Engage in an organizational and/or community campaign to reduce the stigma of mental illness
- Incentivize clinicians to work with patients with behavioral health needs through recruitment and professional development opportunities
- Use existing standard lexicons[18] for telebehavioral health and behavioral health care

Suggested Tools and Resources

Information Technology (IT), Legal and Regulatory Resources

- American Health Information Management Association Telemedicine Toolkit
- California Telehealth Resource Center Webinar: Mapping and Designing Telehealth Clinic Workflows
- Center for Connected Health Policy HIPAA and Telehealth
- Health Resources & Services Administration Medicare Telehealth Payment Eligibility Analyzer
- Legal, Regulatory, and Risk Management Issues in the Use of Technology to Deliver Mental Health Care
- Preparing for the Telehealth World: Navigating Legal, Regulatory, Reimbursement, and Ethical Issues in an Electronic Age
- SAMHSA Consent2Share Application
- Telebehavioral Health Institute HIPAA Risk Assessment Template
- Telehealth Resource Centers HIPAA & Telehealth, A Stepwise Guide to Compliance

Proxy Credentialing Information

- CMS Memorandum on Streamlined Credentialing & Privileging for Telemedicine Physicians & Practitioners
- Joint Commission, Final Telemedicine Revisions

Interstate Licensing Compacts

- Interstate Medical Licensure Compact (Physicians)
- Nurse Licensure Compact
- Physical Therapy Compact
- Psychology Interjurisdictional Compact (PSYPACT)
- Recognition of EMS Personnel Licensure Interstate CompAct (REPLICA)

Sample Policies and Protocols

- Sample Crisis Protocol for Telebehavioral Health Services
- Sample Privileging and Credentialing Agreement
- Telemental Health Toolkit, Chapter 2: Policy and Protocol

Selecting Vendors

- California Telehealth Resource Center Telehealth Technology Toolkit (see PDF page 125)
- A Guide for Telemedicine Service Vendor Contracting: Applying Traditional Contracting Considerations in a New Arena
- Telemental Health Comparisons

Tools and Resources to Combat Stigma

- AHA Behavioral Health - Combating Stigma
- CEOs Against Stigma
- National Alliance on Mental Illness (NAMI) In Our Own Voice Program
- NAMI StigmaFree Program

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Success Factor 3:
Staff Education and Training

Hospitals and health systems should dedicate resources to train and educate staff across the organization on the benefits, availability and use of telebehavioral health.

Given the links between mental disorders and chronic disease[19], clinicians in physical medicine service lines can benefit from using telebehavioral health to check on patients' compliance and progress on physical conditions and comorbidities such as managing diabetes or congestive heart failure.

Key Takeaways:

- Use organizational training to address the stigma of mental illness, emphasizing the importance of behavioral health care.
- For service lines where staff will use telebehavioral health with their patients, train every team member on how to integrate telebehavioral health into usual care.
- Each team member must know the process for initiating and completing a telebehavioral health encounter, including how to use and troubleshoot issues with the technology.
- Tailor training to address each profession and role, including how to work with a multidisciplinary virtual care team with a mix of skills.
- Base training on the most up-to-date evidence-based practice guidelines, while remaining flexible to account for emerging guidance and innovative practices.
- Using effective education and training, stimulate the uptake of telebehavioral health by increasing provider and patient comfort with the technology, and securing stakeholder buy-in.
- Leverage telebehavioral health for supervising and mentoring staff at originating and remote locations to support continuing education and professional development efforts.

Implementation Strategies

STARTING OUT

- Set expectations for using telebehavioral health during orientation and onboarding of staff across the organization, including physical medicine service lines
- Ensure staff have access to training on troubleshooting, addressing common issues and responding to behavioral health crises
- Incorporate telebehavioral health training into pre- and post-licensure training requirements
- Ensure adequate infrastructure and resources to train staff on standard operating procedures
- Provide in-depth training "just-in-time" only to those who will have an immediate opportunity to use the technology
- Standardize training across service lines utilizing telebehavioral health to ensure the service is seen as equivalent to in-person behavioral health care
- Integrate telebehavioral health into physical medicine service lines to address and treat comorbidities and other physical health conditions
- Monitor and track patient outcomes and experience to identify opportunities where training and educating providers could improve care or experience with telebehavioral health services
- Celebrate exemplars who successfully use telebehavioral health services to improve patient access and outcomes
- Freely disseminate metrics on telebehavioral health utilization and quality dashboards to front-line staff and clinical leaders on a consistent and frequent basis

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STRENGTHENING AND SUSTAINING

- Create processes for staff to stay current on technology, evidenced-based care and best practices overall
- Designate an individual or group of individuals who are responsible for assisting staff with using the technology, managing challenging cases and staying current on technology and best practices
- Clarify roles and responsibilities through a job protocol redesign and ensure work is appropriately distributed across care teams
- Ensure training incorporates evidence to demonstrate when telebehavioral health care is superior and/or preferred to in-person care
- Incorporate peer-to-peer training on using telebehavioral health and addressing common challenges into professional development
- Use regular communication channels (e.g., newsletters, monthly videos) to feature clinical champions showcasing innovative uses of telebehavioral health
- Share protocols across the organization and broader system, and educate staff across each service line within the organization on how to use telebehavioral health
- Incorporate coordinating clinical, technical and administrative components into training
- Ensure focus on interprofessional care delivery rather than on independent "silos," supporting providers to work at the top of their license
- Evaluate competencies through performance assessments and interprofessional peer review

Potential Barriers and Suggested Solutions

Limited resources to train and educate staff on telebehavioral health

Suggested Solutions

- Use existing training and learning resources to incorporate telebehavioral health into annual training for clinicians
- Leverage existing educational tools and resources, particularly web-based and virtual training (e.g., online training modules, learning management system)
- Support staff to operate at the top of their licenses by tailoring training for various care team members based on their profession, roles and responsibilities
- Integrate telehealth training into other educational offerings (e.g., orientation, virtual brown bag lunches)
- Explore train-the-trainer models, training a few key clinical champions to subsequently train their staff and colleagues

Lack of clinician buy-in

Suggested Solutions

- Expose clinicians to telebehavioral health through virtual rounds and videos
- Share stories from clinician champions, highlighting their use and successes with telebehavioral health
- Incorporate the patient voice to make the case for why this matters
- Offer incentives to clinicians, such as continuing medical education credits, to encourage uptake and usage
- Provide flexible training options, including remote training, multiple time offerings and peer-to-peer learning
- Demonstrate connections between behavioral health and physical health, including chronic disease management

Challenges engaging remote staff

Suggested Solutions

- Ensure equipment across locations is similar to what's used during training
- Engage clinical champions to communicate and train across care teams
- Host virtual team huddles and focus on sharing challenges and lessons learned to create a support network

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- Implement a user engagement team to follow up, troubleshoot issues and share testimonials
- Require completion of training by all staff, regardless of physical location, and align training goals and incentives across sites
- Educate staff in a synchronous and asynchronous curriculum and ensure curriculum is consistent with on-site care
- Use virtual brown bag lunch and learns to build team relationships and encourage team learning

Discomfort with the technology or something "new"

Suggested Solutions

- Introduce telebehavioral health in small tests of change (e.g., pilot testing, Plan-Do-Study-Act cycles) to increase comfort with the new technology and processes
- Encourage clinicians to use telebehavioral health with established patients who could benefit from and are interested in the service
- Ensure staff are engaged in redesigning new workflows
- Support and celebrate early adopters of telebehavioral health
- Compare to something new that was successfully introduced and made work and life better for staff
- Engage clinical champions to generate excitement and build trust in the new technology

Suggested Tools and Resources

Competencies and Practice Guidelines

- American Academy of Child and Adolescent Psychiatry Practice Parameter for Telepsychiatry with Children and Adolescents
- American Telemedicine Association (ATA) Practice Guidelines for Telemental Health with Children and Adolescents
- ATA Practice Guidelines For Video-Based Online Mental Health Services
- A Framework of Interprofessional Telebehavioral Health Competencies: Implementation and Challenges Moving Forward
- The Need to Implement and Evaluate Telehealth Competency Frameworks to Ensure Quality Care across Behavioral Health Professions

Practice Tools

- American Psychiatric Association (APA) Clinical Practice Guidelines
- APA and ATA Best Practices in Videoconferencing-Based Telemental Health April 2018
- Best Practices for Remote Psychological Assessment via Telehealth Technologies
- SAMHSA Treatment Improvement Protocol: Using Technology-Based Therapeutic Tools in Behavioral Health Services
- Transcultural Psychiatry Made Simple: Asynchronous Telepsychiatry as an Approach to Providing Culturally Relevant Care

Training Programs

- American Hospital Association's Team Training Program: Team Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPPS®)
- ATA Accredited Telemedicine Training Programs

Common Terminology for Training

- A Comparison of Telemental Health Terminology used Across Mental Health State Licensure Boards
- Telebehavioral Health Institute Informed Consent Library

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Success Factor 4:
Patient, Family and Caregiver Engagement

Telebehavioral health provides patients with private, timely and convenient access to needed behavioral health services and care. It also provides an opportunity to reach patients who may not otherwise access health care resources due to social isolation or lack of transportation to in-person care.

Your hospital or health system can use telebehavioral health to follow up with individuals who miss appointments and can support keeping patients in care by eliminating many existing barriers to accessing high-quality behavioral health services. Patients and caregivers who use telebehavioral health are generally satisfied with the service and report positive experiences.[20,21]

Key Takeaways:

- Engage all patients who could benefit—regardless of their age, socioeconomic status or other demographic factors—in discussions about their preferences to receive care through telebehavioral health.
  - Many patients and caregivers may wish to use the technology, but may not know it is available as an option for how to receive care.
- Use shared decision-making with patients, family and caregivers to discuss their goals, values and preferences, and also the benefits, risks, costs and alternatives to telebehavioral health as a treatment option.
- Work with patients and caregivers to increase their confidence in the reliability, confidentiality and user-friendliness of the technology.
- Provide opportunities for ongoing engagement between care teams and patients to share progress, comfort level and any issues with using telebehavioral health, to ensure care remains appropriate.
- Engage patients who support and those who are skeptical of telebehavioral health to help design telebehavioral health programs and ensure they are truly patient centered.
  - By engaging patients and caregivers up front in service planning and design, the services are more likely to be accepted and to work in real life.

Implementation Strategies

STARTING OUT

- Engage patients and caregivers in early discussions about telebehavioral health program design
- Use existing communications and educational materials to support conversations with patients on what to expect from telebehavioral health care
- Equip clinicians offering telebehavioral health to patients and caregivers with answers to common questions about effectiveness, security, privacy and protocols (e.g., what happens if…)
- Ensure there are secure, Health Insurance Portability and Accountability Act of 1996 (HIPAA) compliant mechanisms to share patient records and information gathered through telebehavioral health visits with appropriate providers, to support coordination and continuity of care
- Provide evidence-based training, resources and tools for all staff to support patient and caregiver engagement in telebehavioral health care
- Ensure the patient and family advisory council (PFAC) is familiar with telebehavioral health and informs implementation
- Create tailored patient and caregiver educational materials for various patient populations and

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common services that use telebehavioral health

- Empower patients and caregivers by providing them with tools to initiate a telebehavioral health visit without first requiring an in-person visit
- Ensure compliance with state-specific informed consent regulations regarding telehealth interactions

STRENGTHENING AND SUSTAINING

- Embed engagement in the organizational culture to help ensure all clinicians have ownership over engaging patients, families and caregivers in patient care
- Establish peer support groups for patients, families and caregivers using telebehavioral health to encourage uptake and sustain patient engagement
- Include patients, families and caregivers in designing new organizational and patient-facing resources to support use of telebehavioral health
- In newsletters and presentations, feature lessons learned from engaging an array of patient populations in telebehavioral health care (e.g., children and adolescents, guardians, older adults, nonverbal adults)
- Conduct patient, family and caregiver surveys and focus groups to assess perceptions, utilization and opportunities for improvement
- Collect patient, family and caregiver stories of positive experiences and outcomes using telebehavioral health and share in monthly newsletters and other published materials
- Engage the patient and family advisory council (PFAC) in identifying areas, service lines and sites that could benefit from the use of telebehavioral health
- Create a digital front door that is easy for patients to access and provides up-to-date information on telebehavioral health services and benefits

Potential Barriers and Suggested Solutions

Patient, family and caregiver skepticism about the effectiveness of or hesitance to use telebehavioral health care

Suggested Solutions

- Collect and share patient and caregiver stories that demonstrate the value of using telebehavioral health care, including data that demonstrate the equivalency to in-person care
- Create short resources (e.g., one-pager with frequently asked questions) that highlight the equivalency of telebehavioral health to in-person care
- Ensure patients and caregivers understand that this is an option and they can change their mind and decide later not to receive care virtually
- Build trusting relationships through in-person care then transition to using telebehavioral health

Patients, families and caregivers may not be offered telebehavioral health because of assumptions about their preferences based on demographic and socioeconomic factors

Suggested Solutions

- Assess patient needs and understanding of telebehavioral health to ensure all patients who can benefit from accessing care in this way have the opportunity to use it
- Encourage clinicians to use telebehavioral services, through financial incentives and patient success stories
- Use case studies to demonstrate the variety of patients that can and have benefited from telebehavioral health services (e.g., children and adolescents, mothers with postpartum depression, older adults) and the variety of ways patients can access telebehavioral health services (e.g., smartphone, laptop, tablet)
- Share published evidence supporting the use of telebehavioral health with all patient subgroups (e.g., **ATA Practice Guidelines** note that no studies to date have identified subgroups that do not benefit from, or are harmed by, remote videoconferencing as a telebehavioral health modality.)
- Use patient navigators and/or discharge coordinators who understand local resources to set up initial appointments for all eligible patients and connect to community supports

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- Implement patient engagement metrics within telebehavioral health service lines (e.g., through patient experience surveys)
- Provide technical assistance for providers and patients to support access to payment and reimbursement to encourage usage

Patients, families and caregivers experience technical difficulties (e.g., poor connections), limiting desire for future use

Suggested Solutions

- Ensure clinicians have guidance for trouble-shooting technical issues during a telebehavioral health encounter, including contingency plans (e.g., telephone call if video is spotty)
- Have an IT support plan in place that includes a 24-hour help desk or contract for support services with vendors
- Ensure there is sufficient broadband for the patient volume
- Check patient ZIP codes to determine cell service strength
- Establish and use a checklist for initially connecting a patient to a clinician that clearly outlines what to do and who should do it
- Have a documented plan for crisis escalation (e.g., patient expresses suicidality in session), and practice the emergency protocol

Suggested Tools and Resources

Caregiver Resources on Behavioral Health

- NAMI Family-to-Family Program
- NAMI Homefront Program for Family, Caregivers, and Friends of Service Members and Veterans

Tools to Support Patient, Family and Caregiver Engagement

- AHRQ Engaging Patients and Families in Their Health Care
- Health Research & Educational Trust (HRET) Patient and Family Engagement Resource Compendium
- NAMI Provider Education
- National Quality Partners Playbook™: Shared Decision Making in Healthcare
- SAMHSA Shared Decision Making in Mental Health
- Telehealth and Patient Satisfaction: A Systematic Review and Narrative Analysis

Videos on Engaging Patients, Families and Caregivers in Telebehavioral Health

- Telemental Health Toolkit, Chapter 4: Engaging the Client on Video
- Telemental Health Toolkit, Chapter 5: Cognitive/Interpersonal Approaches
- Telemental Health Toolkit, Chapter 7: Family and Group Therapy

Taking Action

How can we build telebehavioral health into our patient and family engagement strategy?

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Success Factor 5: Measurement

It is important to identify measures specific to your organization and use them to determine whether the telebehavioral health program is meeting the system's and program's goals and objectives, and where opportunities for improvement exist.

Clear and standard definitions for data and quality will support efficient tracking, monitoring and reporting within the organization and to external stakeholders for learning and quality improvement. This can support information sharing to avoid fragmentation in care.

Key Takeaways:

- Prior to selecting measures, understand what data sources are available and think proactively about what data can be collected. Data and measurement can be powerful tools for understanding an organization's current needs, strengths and opportunities.
- Use measurement to help demonstrate the value of telebehavioral health to internal and external stakeholders.
- Start with structural measures (i.e., assessments of whether the organization has specific capabilities), and then move to process measures and finally clinical outcome measures to assess the effectiveness of telebehavioral health programs.
- Whether working to improve access, improve the patient and clinician experience, retain staff, reduce the total costs of care or any combination of these goals, select measures that are:
  - meaningful to patients, clinicians and administrators;
  - improvable;
  - feasible to deploy;
  - broadly usable; and
  - aligned with the overall system goals for telebehavioral health.[22]

Implementation Strategies

STARTING OUT

- Define the purpose for data collection and measurement
- Obtain input from front-line staff and patients to identify outcomes of interest prior to implementation
- Implement a measurement framework (i.e., the **NQF Telehealth Measurement Framework**) to identify which quality measures should be used to assess progress, selecting measures that are most relevant to your hospital or health system
- Begin using operational measures such as adoption of technology, provider training volume, or no-show rates, then assess processes such as time to first appointment and medication adherence
- Obtain agreement from stakeholders across the care continuum on what quality measures will be used to measure progress
- Ensure measure results are used to drive quality improvement and inform decision-making, particularly about where to offer services, to whom services should be offered and how to improve service delivery
- Design and implement EHRs within the organization with an eye toward real-time data collection and clinical decision-making for patients with behavioral health needs
- Incorporate telehealth as an encounter into the specifications of existing behavioral health measures

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- Use measurement results in newsletters, town halls, virtual brown bags and other communication channels to highlight early adopters and encourage uptake

STRENGTHENING AND SUSTAINING

- Create patient, caregiver and clinician experience surveys, and use the data to improve service delivery and program design
- Employ outcome measures, including patient-reported outcome performance measures, to assess outcomes of interest such as improved symptomatology, recovery, aggregate improvement on depression scores, and improved quality of life
- Centralize ownership of tracking, assessing and interpreting quality measures to a department or team within your hospital or health system
- Designate staff to lead organizational quality improvement initiatives based on measure results
- Design workflows to capture routine data within the EHR to guide program improvement
- Frequently use data to inform organizational decisions about where to expand or reduce telebehavioral health services, and what workflow changes are required
- Share key performance metrics across the organization and with senior leadership (e.g., publish data on dashboards) on a consistent and frequent basis, and identify strategies to address any metrics that are below target
- Publish results and share lessons publicly in literature and at conferences to encourage others to adopt telebehavioral health and to eventually benchmark performance against others

Potential Barriers and Suggested Solutions

Measurement burden and competing measurement priorities across stakeholder groups

Suggested Solutions

- Use the multistakeholder groups involved in program, policy and workflow design to prioritize a subset of telebehavioral health measures within the health system or hospital
- Communicate the value and evidence for measurement across the organization, building a culture of data-driven continuous quality improvement
- Implement common measures for telebehavioral health across service lines and sites
- Ensure there is a strong evidence base for selected measures, selecting those that are actionable and inform clinical decision-making
- Leverage technology (e.g., EHR, patient portals, mobile applications) to automate data collection, measurement and reporting
- Explore the use of nonclinical staff to collect data for measurement purposes

Limited adoption of telebehavioral health may lead to denominator challenges

Suggested Solutions

- Use measures to help understand operational delivery of telebehavioral health
- Investigate the reasons why there is limited adoption and employ relevant change management strategies to increase uptake
- Ensure all staff understand how to code telebehavioral health activities to avoid the "if it's not coded, it doesn't exist" mentality
- Measure appropriateness of the modality of care for clinical conditions where telebehavioral health was used

Suggested Tools and Resources

Behavioral Health Quality Measures and Measurement Information

- **2019 Core Set of Behavioral Health Measures for Medicaid and CHIP**
- **Measures Required for Certified Community Behavioral Health Clinic (CCBHC) Demonstration Program**

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- NQF Behavioral Health and Substance Use Standing Committee Reports
- Pragmatic Characteristics of Patient-Reported Outcome Measures Are Important for Use in Clinical Practice

Telehealth and Telebehavioral Health Quality Measurement Resources

- Ensuring Clinical Quality in Telemedicine
- A Lexicon of Assessment and Outcome Measures for Telemental Health
- Medical Technology in the Value-Based Environment: An Assessment of Quality Measure Gaps
- NQF Telehealth Measurement Framework

Taking Action

What measures make the most sense for our organization to assess our telebehavioral health services?

How can we ensure the measures we select are meaningful to stakeholders and do not overly burden patients, caregivers and clinicians?

MEASUREMENT DOMAIN	MEASURE DESCRIPTIONS	DATA SOURCES
Access to care		
Financial impact / cost		
Experience		
Effectiveness		

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Success Factor 6: Community Partnerships

Communities are key to successfully implementing and sustaining telebehavioral health programs.

Community partners can help patients and caregivers access telebehavioral health by providing a trusted point of entry and access to technology.[23]

Key Takeaways:

- To effectively partner with the community, understand:
  - the behavioral health needs within your community;
  - key community stakeholders (e.g., local government, safety-net providers, local community leaders, community-based organizations); and
  - the gaps in current community resources and services.
- Use community health needs assessments and collaborate with community organizations to build a shared vision and goal for telebehavioral health.
- Identify the critical partnership(s) needed to ensure telebehavioral health programs are successful and sustainable. Community-based clinicians, community agencies, faith-based organizations, law enforcement agencies, first responders, emergency medical technicians and more—all play an important role in connecting patients and caregivers to appropriate services.
- Ensure that community partners are aware of the telebehavioral health services your hospital or health system offers and the ways in which patients, caregivers and partners can access the services.
- Provide partners and community members with ongoing opportunities to offer feedback on the telebehavioral health services available, including opportunities to improve and strengthen existing programs and partnerships.
- Collaborate with community leaders or advocate to build trust in the community to increase the likelihood that the community will accept and embrace the telebehavioral health program.

Implementation Strategies

STARTING OUT

- Conduct a community health needs assessment to understand the behavioral health needs and identify gaps in current and desired levels of services available in the community
- Educate the community (e.g., first responders, clergy, community agency staff) on telebehavioral health availability, expectations and use, including treatment for substance use disorder and other conditions or illness that may be prevalent within the community
- Provide resources to the community on reducing the stigma of mental illness
- Be accessible to community leaders and build trust with them through community meetings and town halls, including holding such meetings virtually to highlight the ease of the interactions
- Identify community points of access (e.g., churches, barbershops, community centers) where patients and caregivers may feel comfortable accessing behavioral health resources or support
- Identify an existing inventory of community resources and make this available to patients, caregivers and clinicians
- Collaborate with community partners to raise consumer awareness of the availability of telebehavioral health services and connect patients to care
- Explore the use of social media platforms as a community engagement tool

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STRENGTHENING AND SUSTAINING

- Partner with the community's trusted points of access to offer telebehavioral health services to patients and caregivers
- Build partnerships with the judicial system, law enforcement, other hospitals in the area without existing behavioral health services, and shelters, (among others) to provide support for addressing behavioral health disorders in the community prior to ED or hospitalization
- Dedicate an on-site resource for identifying and connecting with community resources to establish relationships for warm handoffs
- Develop coalitions at the local, regional and state levels (e.g., work with your state or metro hospital association) to offer telebehavioral health services
- Engage community partners in advocacy efforts for improved benefit parity and telebehavioral health reimbursement
- Partner with schools to educate them on early recognition and identification of behavioral health needs, and create an access point in schools for telebehavioral health
- Hold community open forums to elicit input and suggestions on how to improve telebehavioral health care access, cost and quality
- Work with community partners to design marketing campaigns to raise awareness of this valuable service

Potential Barriers and Suggested Solutions

Community partners mistrust new approaches and/or the hospital or health system

Suggested Solutions

- Establish trust early in the process through community engagement and outreach
- Bring community partners to the table for early program design conversations
- Create a mechanism for community partners to obtain information and provide ongoing and frequent feedback to the hospital or health system
- Practice humility, removing any personal agenda and building relationships with community partners around their needs

Fear of overidentification of patients who need services and lack of capacity to address all of their needs

Suggested Solutions

- Set expectations on service capacity and help front-line clinicians understand what additional resources may be available in the community and where they can go for help
- Emphasize how gathering critical information from patients will improve the hospital's or health system's ability to address needs upstream
- Maintain an up-to-date list of community resources and contacts, and integrate into referral and/or discharge workflows
- Create a process for anyone involved in delivering telebehavioral health services can identify resource gaps and create and implement solutions

Concern that collaborating with competitors will negatively impact financial sustainability

Suggested Solutions

- Draft memorandums of understanding (MOUs) with community partners that outline realistic cost-sharing opportunities and set clear goals and responsibilities for both parties
- Begin with one use case to demonstrate success, e.g., collaboratng with community-based organizations for smooth transitions of care
- Partner with community organizations and other provider groups to offer services that are not offered internally within the organization
- Build community collaboration into the business case, establishing cost savings to the system through investments in community partnerships
- Provide information on how timely access to care will free up physical and financial resources

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Suggested Tools and Resources

Community Health Needs Assessment

- Association for Community Health Improvement Community Health Assessment Toolkit
- Centers for Disease Control and Prevention Community Health Improvement Navigator
- Health Research & Educational Trust Engaging Patients and Communities in the Community Health Needs Assessment Process
- National Consumer Supporter Technical Assistance Center's Community Needs Assessment Tool
- SAMHSA How States Can Conduct a Needs Assessment

Community Partnerships Toolkits

- AHA Ensuring Access to Vulnerable Communities, Community Conversations Toolkit
- Increasing Access to Behavioral Health Care Through Technology
- A Playbook for Fostering Hospital-Community Partnerships to Build a Culture of Health

Community and Social Support Resources

- Certified Community Behavioral Health Clinics (CCBHCs)
- Community Access resources and services
- SAMHSA's Behavioral Health Treatment Services Locator

Sample Memorandums of Understanding for Use with Community Partners

- Memorandums of Understanding (MOU) and Medical Center Memorandums (MCM) for Telemental Health Clinics and Traditional Healers/Healing Services
- Sample Memorandum of Understanding for Telemedicine Services and Equipment

Taking Action

Which community partners do we need to engage?

- ☐ Community centers
- ☐ Community clinics
- ☐ Community health centers
- ☐ Faith-based organizations
- ☐ First responders
- ☐ Law enforcement
- ☐ Schools
- ☐ Shelters
- ☐ Workforce development
- ☐ Others?

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Resource	Address
AHA Issue Brief on Telehealth: Helping Hospitals Deliver Cost-Effective Care	https://www.aha.org/system/files/content/16/16telehealthissuebrief.pdf
AHA TrendWatch: Bringing Behavioral Health into the Care Continuum	https://www.aha.org/system/files/research/reports/tw/12jan-tw-behavhealth.pdf
AHA TrendWatch: Realizing the Promise of Telehealth – Understanding the Legal and Regulatory Challenges	https://www.aha.org/system/files/research/reports/tw/15may-tw-telehealth.pdf
Center for Connected Health Policy Tools	https://www.cchpca.org/
CMS Rules for Telehealth Services	https://www.integration.samhsa.gov/operations-administration/CMS_New_Rules_Expand_Telehealth_coverage_July_2013-16547_PI.pdf
Improving Behavioral Health Access & Integration Using Telehealth & Teleconsultation: A Health Care System for the 21st Century	https://nashp.org/wp-content/uploads/2015/11/Telemedicine1.pdf
Health Resources and Services Administration (HRSA) Telehealth Compendium	https://www.telehealthresourcecenter.org/wp-content/uploads/2018/07/HRSA-Telehealth-Compendium_March2018_v4.pdf
Regional Telehealth Resource Centers	https://www.telehealthresourcecenter.org/

Success Factor 2: Organizational Policies and Clinical Workflows

Resource	Address
American Health Information Management Association Telemedicine Toolkit	https://healthsectorcouncil.org/wp-content/uploads/2018/08/AHIMA-Telemedicine-Toolkit.pdf
California Telehealth Resource Center Webinar: Mapping and Designing Telehealth Clinic Workflows	http://www.caltrc.org/upcoming-webinar-mapping-and-designing-telehealth-clinic-workflows/
Center for Connected Health Policy HIPAA and Telehealth	https://www.cchpca.org/sites/default/files/2018-09/HIPAA and Telehealth.pdf
Health Resources & Services Administration Medicare Telehealth Payment Eligibility Analyzer	https://data.hrsa.gov/tools/medicare/telehealth
Legal, Regulatory, and Risk Management Issues in the Use of Technology to Deliver Mental Health Care	https://www.sciencedirect.com/science/article/pii/S1077722914000807
Preparing for the Telehealth World: Navigating Legal, Regulatory, Reimbursement, and Ethical Issues in an Electronic Age	http://psycnet.apa.org/record/2011-28096-001
SAMHSA Consent2Share Application	https://bhits.github.io/consent2share/
Telebehavioral Health Institute HIPAA Risk Assessment Template	https://telehealth.org/blog/hipaa-risk-assessment-template/
Telehealth Resource Centers HIPAA & Telehealth, A Stepwise Guide to Compliance	https://cdn.zephyrcms.com/38b774e3-2cb5-4629-84cd-fced39fd908e/-/inline/yes/hipaa-project-version-1.1 for Printing.pdf
CMS Memorandum on Streamlined Credentialing & Privileging for Telemedicine Physicians & Practitioners	https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertificationGenInfo/downloads/SCLetter11_32.pdf
Joint Commission, Final Telemedicine Revisions	https://www.jointcommission.org/assets/1/6/Revisions_telemedicine_standards.pdf
Interstate Medical Licensure Compact (Physicians)	https://imlcc.org/

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Resource	Address
Nurse Licensure Compact	https://www.ncsbn.org/compacts.htm
Physical Therapy Compact	http://ptcompact.org/ptc-states
Psychology Interjurisdictional Compact (PSYPACT)	https://www.asppb.net/mpage/micrositehp
Recognition of EMS Personnel Licensure Interstate CompAct (REPLICA)	http://www.emsreplica.org/
Sample Crisis Protocol for Telebehavioral Health Services	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4079762/#APP1
Sample Privileging and Credentialing Agreement	http://www.caltrc.org/wp-content/uploads/2014/04/SAMPLE-PRIVILEGING-AND-CREDENTIALING-AGREEMENT.pdf
Telemental Health Toolkit, Chapter 2: Policy and Protocol	https://vimeo.com/115672434
California Telehealth Resource Center Telehealth Technology Toolkit (see PDF page 125)	https://www.nrtrc.org/content/article-files/Business Plans/2012 Program Developer Kit - Part 2.pdf
A Guide for Telemedicine Service Vendor Contracting: Applying Traditional Contracting Considerations in a New Arena	https://www.bakerdonelson.com/a-guide-for-telemedicine-service-vendor-contracting-applying-traditional-contracting-considerations-in-a-new-arena
Telemental Health Comparisons	https://telementalhealthcomparisons.com/
AHA Behavioral Health - Combating Stigma	https://www.aha.org/2017-12-11-behavioral-health-combating-stigma
CEOs Against Stigma	http://ceos.namimass.org/
NAMI) In Our Own Voice Program	https://www.nami.org/find-support/nami-programs/nami-in-our-own-voice
NAMI StigmaFree Program	https://www.nami.org/stigmafree

Success Factor 3: Staff Education and Training

Resource	Address
American Academy of Child and Adolescent Psychiatry Practice Parameter for Telepsychiatry with Children and Adolescents	http://www.jaacap.com/article/S0890-8567(08)60154-9/pdf
American Telemedicine Association (ATA) Practice Guidelines for Telemental Health with Children and Adolescents	https://www.liebertpub.com/doi/abs/10.1089/tmj.2017.0177?rfr_dat=cr_pub%3Dpubmed&url_ver=Z39.88-2003&rfr_id=ori%3Arid%3Acrossref.org&journalCode=tmj
ATA Practice Guidelines For Video-Based Online Mental Health Services	https://www.integration.samhsa.gov/operations-administration/practice-guidelines-for-video-based-online-mental-health-services_ATA_5_29_13.pdf
A Framework of Interprofessional Telebehavioral Health Competencies: Implementation and Challenges Moving Forward	https://www.ncbi.nlm.nih.gov/pubmed/30284147
The Need to Implement and Evaluate Telehealth Competency Framework to Ensure Quality Care across Behavioral Health Professions	https://www.ehidc.org/sites/default/files/resources/files/Evaluating Telehealth Competency Frameworks.pdf
American Psychiatric Association (APA) Clinical Practice	https://www.psychiatry.org/psychiatrists/practice/clinical-practice-guidelines

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Resource	Address
APA and ATA Best Practices in Videoconferencing-Based Telemental Health April 2018	https://www.liebertpub.com/doi/full/10.1089/tmj.2018.0237
Best Practices for Remote Psychological Assessment via Telehealth Technologies	http://www.davidluxton.com/publications/Luxton Pruitt Osenbach 2014 PPRP.pdf
SAMHSA Treatment Improvement Protocol: Using Technology-Based Therapeutic Tools in Behavioral Health Services	https://store.samhsa.gov/system/files/sma15-4924.pdf
Transcultural Psychiatry Made Simple: Asynchronous Telepsychiatry as an Approach to Providing Culturally Relevant Care	https://www.ncbi.nlm.nih.gov/pubmed/23451812
American Hospital Association's Team Training Program: Team Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPPS®)	https://www.aha.org/center/performance-improvement/team-training
ATA Accredited Telemedicine Training Programs	http://www.americantelemed.org/main/ata-accreditation/training-programs
A Comparison of Telemental Health Terminology used Across Mental Health State Licensure Boards	http://tpcjournal.nbcc.org/wp-content/uploads/2016/11/Pages387-396-OstrowskiCollins-TelementalHealth.pdf
Telebehavioral Health Institute Informed Consent Library	https://www.naadac.org/assets/2416/marlene_maheu_ac17ho2.pdf

Success Factor 4: Patient, Family and Caregiver Engagement

Resource	Address
NAMI Family-to-Family Program	https://www.nami.org/Find-Support/NAMI-Programs/NAMI-Family-to-Family
NAMI Homefront Program for Family, Caregivers, and Friends of Service Members and Veterans	https://www.nami.org/Find-Support/NAMI-Programs/NAMI-Homefront
AHRQ Engaging Patients and Families in Their Health Care	https://www.ahrq.gov/professionals/quality-patient-safety/patient-family-engagement/index.html
Health Research & Educational Trust (HRET) Patient and Family Engagement Resource Compendium	http://www.hret-hiin.org/Resources/pfe/16/patient-and-family-engagement-pfe-resource-compendium.pdf
NAMI Provider Education	https://www.nami.org/Find-Support/NAMI-Programs/NAMI-Provider-Education
National Quality Partners Playbook™: Shared Decision Making in Healthcare	https://store.qualityforum.org/products/national-quality-partners-playbook%E2%84%A2-shared-decision-making
SAMHSA Shared Decision Making in Mental Health	http://brss-tacs-decision-tool.samhsa.gov/
Telehealth and Patient Satisfaction: A Systematic Review and Narrative Analysis	https://bmjopen.bmj.com/content/7/8/e016242
Telemental Health Toolkit, Chapter 4: Engaging the Client on Video	https://vimeo.com/115713828
Telemental Health Toolkit, Chapter 5: Cognitive/Interpersonal Approaches	https://vimeo.com/115717945
Telemental Health Toolkit, Chapter 7: Family and Group Therapy	https://vimeo.com/115726492

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Success Factor 5: Measurement

Resource	Address
2019 Core Set of Behavioral Health Measures for Medicaid and CHIP	https://www.medicaid.gov/medicaid/quality-of-care/downloads/performance-measurement/2019-bh-core-set.pdf
Measures Required for Certified Community Behavioral Health Clinic (CCBHC) Demonstration Program	https://www.samhsa.gov/section-223/quality-measures
NQF Behavioral Health and Substance Use Standing Committee Reports	https://www.qualityforum.org/Publications/2018/07/Behavioral_Health_and_Substance_Use_Fall_2017_Final_Report.aspx
Pragmatic Characteristics of Patient-Reported Outcome Measures Are Important for Use in Clinical Practice	https://www.sciencedirect.com/science/article/pii/S0895435615001730
Ensuring Clinical Quality in Telemedicine	https://catalyst.nejm.org/clinical-quality-telemedicine-online-care/
A Lexicon of Assessment and Outcome Measures for Telemental Health	https://www.liebertpub.com/doi/abs/10.1089/tmj.2013.0357
Medical Technology in the Value-Based Environment: An Assessment of Quality Measure Gaps	https://www.advamed.org/sites/default/files/resource/medical_technology_in_the_value_based_environment_-_assessment_of_quality_measure_gaps.pdf
NQF Telehealth Measurement Framework	http://www.qualityforum.org/Publications/2017/08/Creating_a_Framework_to_Support_Measure_Development_for_Telehealth.aspx

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Success Factor 6: Community Partnerships

Resource	Address
Association for Community Health Improvement Community Health Assessment Toolkit	http://www.healthycommunities.org/Resources/toolkit.shtml
Centers for Disease Control and Prevention Community Health Improvement Navigator	https://www.cdc.gov/chinav/index.html
Health Research & Educational Trust Engaging Patients and Communities in the Community Health Needs Assessment Process	https://www.aha.org/ahahret-guides/2016-06-09-engaging-patients-and-communities-community-health-needs-assessment
National Consumer Supporter Technical Assistance Center's Community Community Needs Assessment Tool	http://www.mha-sc.org/resources/Community-Needs-Assessment.pdf
SAMHSA How States Can Conduct a Needs Assessment	https://www.samhsa.gov/section-223/certification-resource-guides/conduct-needs-assessment
A Playbook for Fostering Hospital-Community Partnerships to Build a Culture of Health	https://www.aha.org/ahahret-guides/2017-07-27-playbook-fostering-hospital-community-partnerships-build-culture-health
AHA Ensuring Access to Vulnerable Communities, Community Conversation Toolkit	https://www.aha.org/toolkitsmethodology/2017-07-27-community-conversations-toolkit
Increasing Access to Behavioral Health Care Through Technology	https://www.hrsa.gov/sites/default/files/publichealth/guidelines/BehavioralHealth/behavioralhealthcareaccess.pdf
Certified Community Behavioral Health Clinics (CCBHCs)	https://www.thenationalcouncil.org/topics/certified-community-behavioral-health-clinics/
Community Access resources and services	http://www.communityaccess.org/our-story/about
Behavioral Health Treatment Services Locator	https://findtreatment.samhsa.gov/
Memorandums of Understanding (MOU) and Medical Center Memorandums (MCM) for Telemental Health Clinics and Traditional Healers/Healing Services	https://www.ruralhealth.va.gov/docs/MOUs-and-MCMs-for-telemental-clinics.pdf
Sample Memorandum of Understanding for Telemedicine Services and Equipment	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4079762/#APP1

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Appendix L: SRMC Telehealth SOPs (20)

Annex A to SRMC OPORD 14-XX (Telehealth Standard Operating Procedures)



SRMC Telehealth StandardOperating Procedures

Prepared by the SRMC Tele Behavioral Health Program OfficeSRMC

CLINOPS, Department of Behavioral Health

5 December 2013

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I. General

1. References

a. DODM 6025.13, Medical Quality Assurance (MQA) and Clinical Quality Management in the Military Health System (MHS), 29 October 2013
b. Army Medicine 2020 Campaign Plan, 43rd Surgeon General, United States Army, 04 Mar 13.
c. MEDCOM OPORD 13-38 (Army Medicine 2020 Campaign Plan Governance), 15 March 2013.
d. FRAGO 3 to MEDOM OPORD 13-38, ARMY MEDICINE 2020 CAMPAIGN PLAN GOVERNANCE, 17 July 2013
e. ANNEX A to FRAGO 3 to MEDCOM OPORD 13-38 (Telehealth All Specialty Standard Operating Procedure), 10 June 2013
f. FRAGMENTARY ORDER (FRAGO) 12 (Tele-Behavioral Health Operations Manual) to OPORD 10-70 (Comprehensive Behavioral Health System of Care Campaign Plan), 26 Apr 12.
g. OTSG-MEDCOM Policy Memo 13-009, Use of Telehealth in the United States Army MEDCOM, 20 Feb 13
j. OTSG-MEDCOM Policy Memo 13-010, Behavioral Health Direct Care Performance Guidance for Minimum Capacity, 22 Feb 13
k. American Telemedicine Association (ATA), Core Standards for Telemedicine Operations, November 2007
l. American Telemedicine Association (ATA), PRACTICE GUIDELINES FOR VIDEO-BASED ONLINE MENTAL HEALTH SERVICES, May 2013

2. Introduction

a. SRMC Telehealth (TH) leads the MEDCOM in providing innovative and comprehensive TH services, in particular in the clinical area of Behavioral Health, serving the largest geographic area of any RMC in the MEDCOM with an outreach that spans 2 time zones across 6 states and 11 Medical Treatment Facilities (MTFs) within the Southern Region. More than 20 specialties in Army Medicine use TH for the provision of care to beneficiaries. Please see Section II, Organization; Paragraph 2.C., Services for a list of specialties with TH programs.

b. Through the appropriate and selective use of TH technology, SRMC will increase ADSM access to care, reduce Purchased Care costs, and alleviate quality and readiness challenges. Some examples of tangible and intangible benefits that can be achieved through the appropriate use of TH resources include the following:

1) Connect providers and patients globally to clinical services and information;

2) Cross-level capacity across the Region to support surges and unforeseen requirements;

3) Offer services to areas that have limited capacity in the direct care system and/or purchased care network;

4) Support comprehensive and effective Regional care coordination

5) Facilitate consultations between providers;

6) Create options for meeting access to care standards;

7) Reduce referrals to the purchased care network;

8) Promote cost-effective delivery of care by reducing costs associated with travel and salaries in higher cost areas;

9) Enable productivity gains by sharing FTEs across sites where possible;

10) Increase readiness by enhancing installation capacity.

c. This SOP intends to codify lessons learned, standardize practice, and guide current and future TH deployment across SRMC. This SOP broadly covers all specialties and all synchronous use cases in garrison (e.g. real time video-teleconferencing (VTC)). Future annexes will address specialty care asynchronous use cases (e.g. web-based teleconsultations) as well as additional specialty-specific considerations for synchronous and asynchronous care.

d. This SOP is applicable to and shall be incorporated into local policy and procedures by all SRMC Medical Treatment Facilities (MTFs). MTFs are required to develop and publish their own TH SOPs and, in so doing, may add to but not diminish the standards continued herein. Appendix A describes minimum requirements for SRMC MTF SOPs.

e. For additional information on SRMC TH standards please refer to references in section I (General); 1. (References).

3. Definitions

a. **Telehealth** - the use of electronic, information, imaging and communication technologies to provide and support health care when distance separates the participants, i.e. the patient, the provider, or other health care staff. Telehealth is differentiated from telemedicine in that “telehealth" refers to a *broader scope of remote healthcare services* than telemedicine. While telemedicine refers specifically to remote clinical services, telehealth can refer to remote non-clinical services, such as provider training, administrative meetings, and continuing medical education, in addition to clinical services.

b. **Synchronous Telehealth** – real-time telehealth. “Real-time telehealth sessions are live and interactive, and frequently use videoconferencing technologies. Often, special telehealth-enabled instruments (peripherals), such as a video otoscope (to examine the ear) or an electronic stethoscope, are operated by a nurse or technician at the consulting provider’s direction to remotely perform a physical examination.”

c. **Asynchronous Telehealth** – ‘store and forward’ telehealth. “In store-and-forward telehealth, data (such as digital photographs) are captured locally, then temporarily stored (cached) for transfer at a later time, either via a secure web server, encrypted e-mail, specially-designed store-and-forward software, or electronic health record. The consulting provider then reviews the stored data and makes diagnosis, treatment, and planning recommendations that are electronically transferred or faxed back to the referring provider.”

d. **Telehealth Encounter** – the clinical teleconference between the patient and the specialty care provider; the virtual visit by a patient to a specialty care clinic.

e. **Originating Site** – also referred to as ‘receiving site’ or ‘patient site’. The originating site is the medical treatment facility or clinic where the patient is located during the telehealth encounter.

f. **Distant Site** – also referred to as ‘provider site’. The distant site is the medical treatment facility or clinic where the specialty care provider is located during the telehealth encounter.

g. **Originating Site Provider** – the provider (usually a primary care provider) at the originating site. The originating site provider “triggers” the employment of telehealth as the treatment modality of choice for a particular patient or situation.

h. **Distant Site Provider –** the provider (the specialist or the consulting provider) at the distant site. The distant site provider collaborates with the originating site provider in selecting and employing telehealth as the treatment modality.

i. **Telehealth Site Coordinator** - the person that manages and facilitates the telehealth encounter at the originating site. The telehealth site coordinator is responsible to the clinic chief for overall clinic telehealth coordination; provides first line support to the patient presenter; and communicates and works directly with the SRMC Telehealth Program Office (THPO) staff. The THPO will be established pending resourcing and publication of the appropriate SRMC HQs staffing documents.

j. **Patient Presenter** - the person at the originating site who provides medical assistance to and supports the distant site provider in order to evaluate or assess the patient's condition more extensively during the telehealth encounter. The patient presenter is trained in the use of Advanced Medical Devices (AMD's) (discussed later in this manual) and performs intake procedures and other initial hands-on activities, e. g. range of motion, ear examination, breath and heart sound auscultation, etc. as may be prescribed or directed by the distant site provider during the telehealth encounter.

k. **Telehealth Services Coordinators** - the THPO staff that coordinate overall day-to-day telehealth activities and operation in the region.

l. **USAMITC Video Network Center (VNC)** - serves as the entire MEDCOM's multipoint conferencing service center which provides the platform and technical support for point to point video teleconferences (VTC).

m. **Virtual Examination Room (VER) –** the virtual location where the patient and provider meet, i.e. encounter, each other virtually during the telehealth session.

n. **Telehealth Program Office (THPO) –** SRMC does not currently staff this position. The THPO will be established pending resourcing and publication of the appropriate SRMC HQs staffing documents. SRMC Department of Behavioral Health provides staffing for the Tele Behavioral Health Program Office.

II. ORGANIZATION

1. Roles and Responsibilities in SRMC TH

a. Successful deployment of TH requires collaboration from a variety of clinical, administrative, and technical personnel. A description of roles and responsibilities for key SRMC TH organizations is provided below:

1) **MEDCOM THSL**, Office of the Army Surgeon General, G 3/5/7 Patient Care Integration, provides centralized guidance and coordination for Army TH. The THSL roles and responsibilities stem from the Army Medicine 2020 Campaign Plan. According to the Campaign Plan,

> "Service Lines are core teams focused on major AMEDD health domains with full visibility of assets, policies, services, and resources. The teams will incorporate key stakeholders to assess domain performance, set policy, and build a collaborative enterprise community of practice. This includes the spectrum of health from promotion, maintenance, restoration, and improvement. The Service Line model identifies evidence based practice and tools to set standardized clinical practices throughout the domain of practice. Service Line model establishes system-wide services and policies that promote collaboration and reduce redundancy. (Campaign Plan, p. 38, Annex A-1)"

The Campaign Plan describes the six key capabilities of a Service Line, including:

a) Picture (creating a common operating picture)

b) Policy (setting policy via guidelines and standards)

c) Performance (identifying metrics and establishing a system of ongoing assessment)

d) Preparation (establishing appropriate education)

e) People (building a community of practice)

f) Prospective (identifying future trends for refreshing strategy).

The MEDCOM THSL is responsible for building, providing, and sustaining these key capabilities.

2) **SRMC TH Program Office** maintains execution authority for TH within the Southern Region based upon guidance and directive from the MEDCOM THSL. The 'as needed' use of TH services across SRMC ensures cross-leveling of support on a regional scale. MTFs will notify the SRMC THPO of all additions to current TH activities, programs, and requirements.

3) **USAMITC**, as a Defense Health Agency (DHA) Information Technology (IT) Service Provider, is responsible for the architecture, engineering, integration, technical standards, and support of IT based on TH requirements. USAMITC's Video Networking Center (VNC) leverages its current capability as detailed below to further the proliferation of TH throughout SRMC.

- Consolidated MEDCOM (including SRMC) Service Level Agreements to support TH with desk top video.

- Coordination of Inter-Service Support Agreements with other Department of Defense (DOD) entities as required to use VNC video services and capability for video interoperability between agencies for provisioning of TH video support; Army, Navy, Air Force, Joint Task Force National Capital Region Medical Command, and commercial.

- Determine video interoperability requirements, architecture, engineering and subsequent implementation of Internet Protocol Video (IPV) services with comparable services with the Department of Veterans' Affairs (VA).

- Procurement, deployment, and provisioning of IPV capability for SRMC TH services.

- VNC provides audio and video conference bridging for the medical community of interest, as required to support business processes.

- VNC Scheduling Operations provides Enterprise multipoint audio and video scheduling services.

- VNC Technical Support provides hardware and software support through sustainment services such as upgrades and modifications, application maintenance, and technical customer support.

- Perform sustainment activities that include procurement, budgeting and projection of future material/personnel requirements.

- VNC serves as the Community of Interest Video Manager for MEDCOM with Defense Information Systems Agency.

- USAMITC Medical Network Operations Security Center provides coordination of IT security requirement associate with IPV clinical VTC within and between Service medical agencies.

4) **TATRC** fosters research on telemedicine/mHealth as well as promotes and manages science and engineering in other key scientific domains. TATRC has played a key role in the development of Army TH by leading three key telemedicine contracts.

5) **Other Service Lines / Clinical Areas / Specialties** serve as functional proponents for TH solutions in their areas of expertise in coordination with the SRMC THPO.

2. Services

a. SRMC offers comprehensive, coordinated, patient-centric care within capabilities and current resources and/or other centralized funding. As required, SRMC coordinates with MEDCOM and other RMCs to access their capabilities and resources in the provision of these services across RMC borders.

b. Additionally, SRMC TH capabilities can be offered under MEDCOM approved Resource Sharing Agreements between VA, DOD and academic universities whenever supported by a business case analysis. However, before TH services are exchanged outside of SRMC, a formal written agreement coordinated with the MEDCOM THSL prior to signature is required. At a minimum, this agreement must cover credentialing and privileging, licensure, informed consent, patient safety, and malpractice coverage (as necessary).

c. The following represents a suggestive list of SRMC specialties/clinics that can benefit from appropriate TH applications. It is based on current specialties/clinics

which were offered via Army Telehealth in CY12 (source: M2 via MEDCOM Program, Analysis, and Evaluation).

1) Allergy
2) Audiology
3) Cardiology
4) Child Psychiatry
5) Child Psychology
6) Community Health
7) Dermatology
8) Endocrinology
9) Family Medicine
10) General Surgery
11) Infectious Diseases
12) Internal Medicine
13) Neurology
14) Neurosurgery
15) Nutrition
16) Obstetrics and Gynecology
17) Oncology
18) Orthopedics
19) Otolaryngology
20) Pediatrics
21) Physical Therapy
22) Primary Care
23) Psychiatry
24) Psychology
25) Pulmonology
26) Rheumatology
27) Social Work
28) Speech Pathology

3. Values and Ethics

a. All providers and staff engaged in the provision of TH will adhere to the Standards of Conduct prescribed by Department of Defense Directive (DODD) 5500.07 and all related implementing regulations. All SRMC TH providers will be aware of and adhere to medical and other professional discipline codes of ethics when using TH.

III. CLINICAL WORKFLOW

1. Access to Care

a. Hours of Operation: TH services are typically available for routine outpatient care during normal business hours, local time, Monday through Friday with the exception of national holidays and hospital-directed holidays or activities. Training holidays may not necessarily alter appointments at the supported sites. Due to the expanding nature of TH, extended hours, including weekends, may be required to meet assigned missions. SRMC MTF Commanders will determine availability of emergency services via TH (i.e. patient presents as an emergency, as opposed to a patient decompensating during a routine TH appointment and the situation becomes an emergency).

b. Method of Access: Patients at MTFs within SRMC obtain TH appointments according to each clinic's SOP. For cross RMC TH support, MTFs will communicate the requirement with the SRMC TH Program Office who will in turn negotiate appointment slots on a case-by-case basis at the time of support request.

c. Appointment Access Times: In general, new appointment slots should be opened on a continuous basis to ensure MTFs maintain a 45-day rolling calendar of available appointments. Patients are scheduled with a new appointment whenever they see a provider within the SRMC TH Service for the first time. Subsequent appointments with the same provider for the same condition are scheduled as follow-up appointments. Access to care varies by patient acuity; patients should obtain a routine new appointment within the MHS access standards.

2. Support from MTFs

a. MTFs scheduling new patients are required to submit appropriate documentation to the specific SRMC TH Service prior to the patient's first appointment. Documentation requirements for clinical services are as follows:

1) The first document to be submitted is the Patient Intake Form. MTFs may use a local version (either paper-based or, if applicable, internet-based).

2) The patient should complete the Patient Consent Form (MEDCOM Overprint (OP) 45 before the telehealth encounter is commenced. A sample MEDCOM OP 45 can be found at Appendix B.

3) MEDCOM OP 45 should be scanned into the Armed Forces Health Longitudinal Technology Application (AHLTA) either as an “Add Note” or in the “Clinical Notes” module for access by the treating TH provider.

4) Other documents may be required; these are described in the MTF TH SOPs (Annex _).

TH providers and local MTF staff are responsible for screening patients for the use of TH, following local procedures. TH patients requiring levels of care not offered by an outpatient modality are referred to their local MTF by the TH provider for appropriate referral. For a patient requiring hospitalization, the local MTF will follow its local protocol for admissions to either military or civilian facilities. A copy of this protocol, as well as an explanation of how it pertains to TH as appropriate, can be found in the MTF SOP. Where provider-to-provider coordination is required during the admission process, the TH Provider will coordinate directly with the TRICARE approving authority.

b. Please see Appendix A for any additional MTF support guidelines and requirements.

3. Referral Guidelines

a. SRMC TH Service may accept referrals to provide services to eligible beneficiaries so long as it is within specialty-specific guidelines to do so. These referrals include but are not limited to self-referral, Command referrals in accordance with (IAW) DOD Instruction (DODI) 6490.04, DOD provider referrals, and civilian provider referrals.

b. DOD providers may refer patients by telephone or by completing a Consultation Sheet (Standard Form (SF) 513). If SF 513 is used, the provider will complete the SF 513 as appropriate and post it in AHLTA.

c. Non-DOD civilian providers (e.g. network primary care managers) may refer patients using the standard process. Civilian provider referrals must include a patient’s signed release form allowing for consultation with the civilian provider(s) to gather background information. The patient release will also include consent to release information back to the civilian provider if the plan is for the civilian provider to resume patient care following the TH consult.

d. Please see Appendix A for any additional MTF procedures for sharing TH patient information.

e. Each specialty will develop criteria that exclude patients from the TH program.

4. Prescription and Laboratory Guidelines

a. TH staff shall comply with the specific consents to treat and administer medication as normally required by the specialty in which TH is used.

b. Providers should order/place prescriptions/laboratory orders in the CHCS host of the patient site. Further, providers should document in the AHLTA record of the provider site that a prescription/laboratory order was ordered for patient. To do this, each prescribing provider must obtain a CHCS password for each MTF that is currently supported under a different IT platform.

    1) If AHLTA host issues occur due to a lack of connectivity or incompatibility, or if the provider is unable to access the supported MTF CHCS platform, the provider must make arrangements to have the original prescription sent to the supported pharmacy in the most expedited means possible.

    2) Required Controlled Substance Act Criteria for scheduled medication administration must be followed. Medication management must comply with the appropriate guidelines established by the SRMC TH Office, supported MTF, and the governing professional organization (e.g., the American Psychiatric Association (APA), American Academy of Child and Adolescent Psychiatry (AACAP)) practice parameters.

c. Ordering of prescriptions and laboratory orders, as well as reporting adverse events, must comply with any additional guidelines established by the SRMC TH Office and the supported MTF. Please see Annex C for more information.

5. Clinical Specifications

The following clinical specifications should be adhered to, ensuring that local protocols are followed.

a. MTF Commanders and TH providers will ensure that the standard of care delivered via TH is equivalent to any other type of care that can be delivered to the patient/client, considering the specific context, location and timing, and relative availability of in-person care. Peer reviews, as well as quality improvement and performance management processes at the SRMC and MTF

levels, are integral parts to ensuring that TH is meeting the relevant standard of care.

b. TH providers will maintain professional discipline and adhere to clinical practice guidelines in the delivery of care in the TH setting. Any modifications to clinical practice standards for the TH setting will ensure that clinical requirements specific to the specialty are met.

c. TH clinicians should have cultural competency in the population served. The TH provider must be aware of possible cultural differences among providers, patients and staff. This includes cultural differences in sister DOD Services, VA and civilian partners. SRMC and MTF TH staff will assess the difference between provider and patient sites in planning for and managing ongoing services and notify/change the practitioner should additional cultural competencies be needed.

d. TH providers will ensure that all persons in the exam rooms at both sites are identified at the beginning of the consultation. Disclosing the identity of persons who are attending the consultation will be done by announcing the presence of individuals present and asking the patient's permission for additional persons to be in the room or, where practicable, panning the exam rooms at both sites with the video camera. Permission from the patient is not required if safety concerns mandate the presence of another individual or if the patient is being legally detained, but permission should be encouraged by the practitioner.

e. The sharing of clinical history and results shall comply with established legal and regulatory requirements. SRMC and MTF personnel shall have agreements in place that outline the procedure for securely sharing such clinical history and results. Appropriate guidance for specialties beyond Tele Behavioral Health (TBH) and Tele Dermatology to be published as developed.

f. TH providers will ensure that clinical VTC procedures for the evaluation and treatment of youth follow the same guidelines presented for adults, with modifications to consider the developmental status of youth, such as motor functioning, speech and language capabilities, and relatedness. When legally required, the TH provider will inform families when a TH appointment is scheduled for their child, in order to prepare their child for a clinical VTC appointment.

g. TH providers will adhere to regulatory authority and all requirements (including but not limited to licensure and malpractice / liability insurance) in accordance with reference 1.a. (DODM 6025.13).

h. Patient care should be provided in medical settings where possible. This is to ensure that beneficiaries receive care in appropriate settings and are able to receive medical attention should adverse incidents arise in conjunction with the provision of services (e.g. convulsions, myocardial infarctions, decompensation associated with BH encounters).

6. Record Management

a. The same standards for accuracy, completeness, timeliness, and safeguarding of records of patients seen in-person apply to TH Services, as well as the same access restrictions and processes for the retrieval of records.

b. Generally, AHLTA notes are the only acceptable method of documenting patient care. Specifically, the content and outcomes of the patient encounter are documented in the electronic medical record and archived within AHLTA. Paper-based records or other alternative information systems can be used in cases where the electronic health record is not available or does not permit the provider to fully document a synchronous encounter (both data and digital images). Medical information generated from TH is part of the medical record in the facility rendering the service to the patient. To more fully document an encounter, automated records may also be used if available.

c. All clinical notes will be placed in AHLTA within 72 business hours of the completed appointment to enhance quality of care and patient safety by providing a timely process for communicating findings after consults and encounters. Due to the nature of the platform-based electronic medical record, some notes may be required to be amended or appended. The inherent problems associated with AHLTA crossing IT platforms may cause a delay in the availability of the clinical note. If the supported MTF requires a note prior to its availability in AHLTA, the provider must send it to the supported MTF via the most expedited means possible.

d. When the SRMC TH Services engage in research, fully approved by the SRMC's Department of Clinical Investigations (DCI) and further consented by both the MTF and the patient involved, the research protocol will articulate precise record-

keeping protocols and security methods. All research must comply with the institutions' Institutional Review Board (IRB) policy.

7. Workload Accounting and Coding

a. The Unified Biostatistical Utility (UBU) Office at Health Affairs approved workload accounting and coding guidance in Jul 06. Official TH coding guidelines can be found at: MHS Coding Guidance: Professional Services and Specialty Coding Guidelines, Version 3.6, UBU, 1 March 2013, Section 4.2 http://www.tricare.mil/ocfo/bea/ubu/coding_guidelines.cfm.

b. Workload credit and labor reporting associated with TH will be reported as follows:

1) When the patient is present, the distant provider (Skill type 1 and/or 2) who is actually providing the service will receive credit for the encounter/visit.

2) When there is a provider (Skill Type 1 or 2) physically present during the encounter, both the (local and distant) provider will receive credit for the encounter (as long as documentation supports their services).

3) Workload and the man-hours of both providers are reported against the work center where the care was provided. In both scenarios, both providers must document the care in AHLTA.

c. MTF Commanders will ensure that providers code for all TH encounters. Currently, use of the "GT" modifier with a procedure or E&M code signifies that synchronous, real-time communication between the remote clinician occurred with the patient present and participating in the TH visit. . If the encounter is asynchronous use the "GQ" modifier with a procedure or E&M code Use of the "GQ" modifier signifies that the distant site physician or practitioner certifies that the asynchronous medical file was collected and transmitted to him/her at his or her distant site from an eligible originating site when the telehealth service was furnished. [See MEDCOM Policy 13-009, Paragraph 7b(4)(b)]

d. Appendix C provides a Quick Start Guide for TH coding. It is intended to help both the provider and patient sites code appropriately for TH encounters. Anticipate update based upon evolution of MEDCOM policy and coding guidance.

IV. ACCREDITATION & REGULATION

1. Patient Safety and Risk Management

a. Patient safety is of utmost importance. Treating a patient via TH requires additional safety measures including but not limited to some modifications in clinical operations.

b. The inclusion of cases for a TH consult is at the discretion of the referring and consulting clinicians subject to limitations placed by SRMC and MTF Commanders and TH staff based on available resources and/or clinical discretion. Please see the MTF Appendix for any limitations.

c. The MTF should always conduct a patient site assessment, and the MTF should use this assessment to develop emergency management protocols for all clinical TH encounters involving patient interaction. The MTF should have a privacy officer or Health Insurance Portability and Accountability Act (HIPAA) compliance officer in addition to other personnel required to conduct a patient site assessment. Providers and staff involved in TH encounters in an MTF's catchment area should be familiar with these emergency management procedures. At a minimum, protocols will include:

    1) A clear explanation of roles and responsibilities in emergency situations.

    2) Determination of outside clinic hours emergency coverage (if any).

    3) Guidelines for determining at what point other staff and resources should be brought in to help manage emergency situations.

    4) Contact information for a list of designated licensed providers, at least one of which will always be positioned and available to respond to a patient in crisis at the patient site MTF.

    In general, adequate support staff or responsible family members shall be present at the patient site in order to safely care for the patient. Trained staff members will be available in the immediate area of TH encounters at all times during clinical TH encounters to institute emergency management protocols if necessary.

d. Providers shall be sensitive of impact of disclosures made during emergency management on patient confidentiality and relationships in small communities.

Providers shall consider including families in emergency treatment situations where possible and clinically appropriate, while also assessing and being attentive to exacerbation of family tensions in small communities.

e. If a patient requires hospitalization, the TH Services provider will coordinate with the MTF staff to follow MTF admission procedures. MTF staff will ensure that TH providers are aware of local civil commitment regulations as applicable.

f. Permission from the patient for including additional persons in the room is not required if safety concerns mandate the presence of another individual or if the patient is being legally detained. However, permission from the patient should be encouraged by the practitioner.

g. Continuity of care is of special concern in TH encounters to ensure the safety of patients and those around them. MTF SOPs will contain clearly defined roles, responsibilities, and procedures around patient safety issues related to continuity of care (e.g. procedures to follow if a patient requires a face-to-face encounter or other in-person attention for safety reasons).

2. Licensure and Credentialing Requirements

a. Licensure and credentialing requirements are currently outlined by DODM 6025.13, Medical Quality Assurance (MQA) and Clinical Quality Management in the Military Health System (MHS), dated 29 October 2013. Enclosure 4, Credentials and Clinical Privileges; Section 6, CREDENTIALS, PRIVILEGING, AND ADDITIONAL REQUIREMENTS FOR TELEMEDICINE provides specific requirements relative to providers utilizing Tele health technology. As an example, with regard to Behavioral Health clinical practices using video teleconferencing equipment, individually licensed Warrior Resiliency Program (WRP) providers will be privileged at the WRP/BAMC and at each of the MTFs where direct care is provided to patients. All providers will be credentialed at WRP/BAMC and transfer briefs will be sent to all supported MTFs as required. MTFs have the option under the provisions of the DODM referenced above to rely on the credentialing and privileging determinations of the facility where the provider is located to make local privileging decisions. This is known as “privileging by proxy.” The Patient Site must occupy a federally designated clinical space, complete with appropriate support staff and rapid access to behavioral health providers should an emergency arise that would require behavioral intervention at the Patient Site. Providers who render official readings of images, tracings, or specimens or who only provide consultative advice do not

require privileges at the receiving MTF. In such cases the MTF must obtain and maintain a copy of the ICTB and delineation of privileges from the provider's MTF of assignment, but do not privilege the provider.

b. Externs, interns, and residents engaged in TH Clinics are supervised by a licensed provider within their respective training programs and ***therefore are not privileged*** at the supported MTF.

3. Informed Consent

a. Per AR 40-68, Clinical Quality Management, telemedicine encounters require written informed patient consent before the use of said technology.

b. MEDCOM Supplement 3 to AR 40-66, Medical Records Administration and Healthcare Documentation, further governs the use of informed consent for clinical telehealth encounters. For clinical telemedicine encounters with a patient, MEDCOM OP 45 will be used to meet the TH authorization for counseling and/or for inpatient /outpatient medical/dental care. MEDCOM OP 45 does not replace State-mandated telemedicine consent forms or Optional Form (OF) 522 (Medical Record-Request for Administration of Anesthesia and for Performance of Operations and Other Procedures) requirements for portions of the encounter that do not involve telemedicine. For example, a clinical provider-patient synchronous encounter via telemedicine would require a patient to be given a MEDCOM OP 45 and any other requirements as needed for that specialty (e.g. OF 522 for surgical procedures). Local consent forms will not be used in place of MEDCOM OP 45. An electronic form containing the data elements of MEDCOM OP 45 may be used. Providers will be aware of and follow obligations to verbally consent patients as well.

c. If a telehealth encounter with a patient is videotaped, then consent will also be recorded on MEDCOM OP 45. In most cases, the only reason to consider recording the healthcare episode is to capture information that has compelling educational value. Written informed consent is not required if the video-capture is for the documentation of negligence or abuse.

d. Patient Administration or other clinical staff should scan informed consent into the electronic medical record once obtained.

6. Information Security

a. SRMC and MTF TH providers and staff will be aware of the enhanced requirements for privacy and confidentiality that are afforded to patients receiving care and will comply with related federal and state law as applicable.

b. In the event that TH services are provided off federal property in another country and/or political jurisdiction, the privacy requirements of that country/political boundary shall be followed for the TH service, taking into account any regulations unique to the specialty being provided via TH.

c. Patients will be informed of all personnel involved in the clinical VTC encounter.

d. Any patient information associated with TH, in either electronic or paper format, is subject to current HIPAA standards. TH programs must comply with HIPAA Transactions and Code Set Identifier, Privacy and Security Standards as they evolve. MTFs must coordinate with the HIPAA of 1996 privacy officers to validate local protocols before TH sessions with patients or involving patient information begins.

e. MTF Commanders will ensure that technical security measures are implemented to guard against unauthorized access to Electronic Protected Health Information (EPHI) that is transmitted over an electronic communications network. Follow the guidelines for addressable implementation specifications:

    1) Implement mechanism to encrypt data in transit, if reasonable and appropriate;

    2) Implement an alternative security measure to accomplish the purposes of the standard, or;

    3) Implement reasonable and appropriate measure to ensure the standards can still be met.

    4) The rationale for the election of an alternative safeguard, or to not implement anything at all, must be documented with particular thoroughness.

    5) Please see the Technology section of this SOP for additional information.

7. Training

a. MTF Commanders should ensure that healthcare and administrative personnel are trained, knowledgeable, and have the capacity to use TH as part of their clinical practice and/or administrative duties related to TH clinical practice.

b. The MEDCOM THSL, in coordination with Army Medical Department Center & School, has developed two distance-learning training modules that will provide a foundation for TH. The training modules are mandatory for TH providers and staff and are available on the Army Training Requirements and Resources System. This allows for a certificate of training to be printed, the first module is available and the second module is pending to be loaded into the system. MTF Commanders may establish additional training content for providers privileged in their facilities:

   1) 'Policy & Procedures' (Clinical and Regulatory Training module). The training module will assist with the following areas: (i) policy and associated procedures (e.g. credentialing, privileging, licensure, medical documentation, workload accounting and coding, emergency management, and informed consent); and (ii) procedures on how to conduct a TH encounter (e.g. appropriate environment and camera etiquette).

   2) 'Connect & Communicate'. This training addresses the technical aspects of providing care via telecommunications equipment (e.g. how to operate and troubleshoot equipment).

c. Additionally, at a minimum, TH providers will obtain local hospital orientation, HIPAA training, Information Assurance (IA), CHCS training, AHLTA training, and training in the use of web-based documents that vary across the AMEDD.

d. Training requirements specific to TH will be tracked by both the SRMC TH Office and the local MTF or TH Hub. Differences in required training may exist between the patient site and the provider site. *The TH provider will comply with both requirements.* The TH provider will maintain a copy of the TH specific training in their PAF / CAF and in their credentials file which should be maintained at each of the MTFs where services are provided. Other TH personnel will complete and maintain records in their CAF.

e. Reading this SOP, as well as OTSG / MEDCOM Policy Memo 13-009, will begin to familiarize TH providers and staff with appropriate information on TH.

f. MTFs may require additional TH training. The content of that training should be set at the discretion of the MTF commanders as a supplement to the requirements addressed by this SOP.

g. For training material on how to use digital cameras in a medical setting contact charles.m.lappan.civ@mail.mil, SRMC Teledermatology program.

8. Quality Improvement and Performance Management

a. Quality improvement for all TH Services falls under the same guidelines as face-to-face encounters. Please consult AR 40-68 and local guidelines for more information.

b. Peer review procedures will be established for all clinicians participating in TH. Those procedures will be consistent with the existing procedures of the MTF to which the TH provider is assigned. If specific procedural issues exist between this document and the local MTF, the MTF should raise those issues with the SRMC TH Office.

c. The SRMC TH staff, IAW the MEDCOM THSL, will collaborate with MEDCOM Program Analysis & Evaluation to conduct, on a periodic basis, programmatic evaluations in concert with performance measurement efforts.

9. Patient Advocacy

The process for resolving providers' and patients' questions and issues that might arise as part of a TH encounter is complicated by the fact that services span a provider site and patient site locations. To resolve any issues or questions that arise as part of a TH encounter, the patient and/or provider should contact the patient advocate at the patient site, who will be the primary advocate. Please consult patient advocacy guidelines at the patient's MTF for more information.

10. Use of TH for Research

a. Should TH be used in research studies/trials, all requirements for human subjects will be applied.

b. Attention will be paid to issues of confidentiality and informed consent in IRB documents, ensuring that patients who are involved in research trials via telemedicine understand consent is for the purposes of research and not for receiving care via TH. Efforts will be made to ensure that patients receiving TH services are aware that TH conversations will be recorded only with their consent.

c. When MTF TH Services engage in research that is fully approved by SRMC's DCI and further consented by both the MTF and the patient involved, the research protocol will articulate precise record-keeping protocols and security methods (refer to section 6 under IV. Clinical Workflow Regarding Record Management). All research should comply with institutions' IRB policies.

d. Staff members who function in data mining for the research project must be IRB qualified. Certification / recertification is online. Recertification is required every three years.

11. Other Considerations

a. TH encounters with a patient can be considered clinical or preclinical / administrative. If a licensed provider makes clinical determinations as a result of a telehealth encounter, then this constitutes the practice of medicine. As a result, the telehealth encounter will be considered a "clinical encounter". Examples include tele-psychiatry, tele-neurosurgery, and tele-Temporary Disability Retired List determinations. If a provider does not need to be licensed to perform a service, or if clinical determinations are not made as a result of a telehealth encounter, then this does not constitute the practice of medicine. As a result, the telehealth encounter will be considered a "preclinical encounter". An example includes general patient education (non-personalized). For clinical encounters, providers must abide by the licensure, credentialing, and privileging regulations as summarized in this policy. Additionally, if a clinical determination is made, then the encounter is required to be coded in AHLTA for the purposes of telehealth.

b. Some TH services are considered clinical for licensure and preclinical / administrative for credentialing and privileging. One example is tele-Medical Evaluation Boards (tele-MEB) to include the writing of the narrative summary. Tele-MEB is considered a clinical telehealth encounter from the perspective of state medical boards and administrative from the perspective of the DOD and for the purposes of credentialing and privileging (reference 1.a.).

V. FACILITIES

1. Space Requirements

a. Guiding Documents: Unified Facilities Criteria (UFC) 4-510-01, The Whole Building Design Guide, MHS Room Templates, and MHS: DOD Space Planning Criteria Chapters provide basic guidance for new construction or the renovation/modification of space. These guiding documents shall be adhered to regarding space that will be designed or renovated for the provision of TH services to address the structural, interior finishes, Heating, Ventilation, and Air Conditioning, sound attenuation (Sound Transmission Class ratings), lighting, and architectural requirements of the TH room.

b. Room Requirements: Each MTF must decide what TH services will be provided and/or supported. These services should be clearly defined in the MTF Concept of Operations and local TH SOPs. Included in these documents are plans for how the TH program will function. Fixed items and clearances need to adhere to The Architectural Barriers Act accessibility standards. Room specifications from the guiding documents discussed above shall be adhered to. Minor modifications and allowances are permitted contingent on infrastructure constraints and the requirements of the MTF TH service.

1) Room Types: TH rooms are designed as transmitting and/or receiving locations. During a TH session, the transmitting and receiving locations should be considered a patient care space. Both of these spaces are clinical environments and should reflect that. Each room shall be designed to maximize comfort, audio and visual privacy, and confidentiality while facilitating clinical interactions. The TH spaces will conform to the same standards the MTF provides for traditional patient encounters. MTFs are responsible for ensuring that their specific TH locations are suitable for assuring patient privacy and safeguarding patient information. Refer to the section on Information Security in this document for additional details.

2) Room Specifications: The TH transmitting room will be designed as an exam room, but will be flexible and adaptable to accommodate changing functions of the room. Per the UFC 4-510-01 Appendix B, room code WKTM2 has been added to the Space and Equipment Planning System and shall be used in planning the TH transmitting room. The TH transmitting room is programmed at 120 net square feet (nsf) to accommodate patient posture changes and allow for movement to be clearly visualized by the provider. The TH receiving room is typically a

provider office and is sized at 100-120 nsf. The privacy of the patient and confidentiality of the session (e.g. sound attenuation, sign on door, etc.) must be considered for each space used for TH encounters, especially when an existing room is adapted or serves as a multipurpose room for the delivery or receipt of TH. During planning it is critical to identify the function of the space in order to outfit it with the proper furnishings and equipment.

3) Lighting Considerations: The TH space should be well lit, preferably as close to daylight as possible (i.e., fluorescent day-light or full spectrum bulbs rather than incandescent). The room should be comfortably lit for the patient and provide adequate illumination for the provider to see the patient without shadows falling on the patient's face or other areas where clinical data is being displayed. The goal is to create even lighting where colors are accurate. The lighting of the provider's space should meet the same requirements in that the patient must be able to see the face of the provider with no shadowing. Daylight is the softest and most comfortable light for the patient to view the clinician. Avoid backlighting from windows, overhead lights, and harsh lighting sources to maximize the clarity of the transmitted images. Window shades may be required to reduce excess glare. Some directional lighting may need to be installed to illuminate the face for facial responses during the interview. If required, directional lighting should be at a 30 degree angle. Supplemental lighting may be required depending upon the room set-up and examination required. Full spectrum lighting may be an option in TH spaces. Most lighting measurements are made at 30 inches above the finished floor.

4) Visual Considerations: Backdrops behind the patient and provider should be clean and plain in color and without distractions such as excessive office papers, or bookshelves. Mobile partitions are an option to provide a suitable backdrop. Light blue is an optimum color for backdrops as blue neither reflects nor absorbs light, is a calming color, and helps to accentuate the area of interest. Light grey can also be utilized as a backdrop. Flat paint (versus a gloss) on walls will limit reflection/glare. If there are bookshelves or other office furniture, then a test connection should be made to ensure there is no camera distortion as some cameras may focus on office items and distort the provider. Efforts should be taken to limit visual clutter. Give consideration to the gaze angle, the angle between the near participant's camera and where the near participant looks at the onscreen far participant (eye contact). The vertical location of

the far participant on the screen will affect gaze angle. Gaze angles of approximately five to seven degrees are imperceptible to most persons. Gaze angles should be as small as practical. This should be considered when planning for the room to be outfitted with office and medical equipment.

5) IT Considerations: The TH room design should address the requirements for IT support, and the infrastructure should allow for the expansion of features as technology advances. Consideration should be given to identifying a protocol for telephonic or other type of back-up, if appropriate. If the MTF intends to utilize the TH space for group therapy or psycho-education, the MTF should utilize a dedicated room that will accommodate the equipment and space for approximately 8 to 10 patients. Requirements for low voltage systems such as staff assist or nurse call in the TH spaces needs to be planned for.

6) Furniture Considerations: Furniture and fixture selection is based on the type of care the MTF will employ. For example, group therapy requires more chairs than individual therapy. If a Child Play/Observation Room is required, the setting should incorporate a table to facilitate youth encounters and permit the provider to observe the patient drawing, but the table should not interfere with communication or viewing the youth's motor skills. Some simple toys may be provided both to occupy the child and to allow assessment of skills and should be selected based on age-appropriateness and child safety standards. Infection Control Standards need to be adhered to if providing toys and items to assess motor skills. The comfort of the TH professional undertaking the consultations should be considered to prevent fatigue and computer vision syndrome problems common with increased computer interactions. Chairs should minimize excessive movements as blurring of the provider may occur. Ergonomic considerations should be addressed for both patients and staff. Each RMC TH service may have specific equipment that is required to maximize the clinical interactions.

7) Other Considerations: Depending upon the type of TH appointment, there may need to be special considerations. If a physical examination is required, the TH equipment should be positioned to provide sufficient viewing by the receiving provider, and to allow the camera to scan the entire TH transmitting space. Items that could be a safety concern should not be in any TH space (e.g. personal mementos and office items).

2. Administrative Support

a. The following recommendations for administrative support of TH should to be adhered to if at all possible. Refer to the section on TH Technological Requirements in this document for additional detail.

b. MTF TH staff, along with local IT support staff as appropriate, will ensure the technical readiness of the TH equipment and the clinical environment. USAMITC VNC can remotely assist, if needed, with the readiness of the TH equipment.

1) MTFs providing TH should have policies and procedures in place to ensure the physical security of the equipment and the TH area.

2) MTFs providing TH will ensure compliance with TJC recommendations, relevant safety laws, regulations, and codes for technology and technical safety.

3) MTFs providing TH shall have infection control policies and procedures in place for the use, maintenance, and cleaning of TH and medical equipment, including patient peripherals that comply with organizational, legal, and regulatory requirements.

VI. TECHNOLOGY

1. Technological Requirements

a. Clinical VTC Equipment. There are a variety of clinical VTC systems (e.g. CISCO (formerly Tandberg), Polycom, LifeSize) currently in use with the RMC TH Services. Additional systems purchased should be compatible with the current infrastructure specifications which can be found at https://vtc.medcom.amedd.army.mil/tech_support.asp. As a DOD Information Assurance requirement, maintenance agreements are required for all hardware connected to a DOD network or Army Local Area Network. Clinical VTC implementation should ensure USAMITC VNC input from initial requirements gathering through equipment installation. Computers used for clinical VTC will comply with all facility, state, federal, Army and DOD regulations, as appropriate. Equipment used in TH complies with International Telecommunications Union Audio and Video standards), will allow interoperability. Please see https://vtc.medcom.amedd.army.mil/tech_support.asp for the latest acceptable VNC minimum standards.

1) The American Telemedicine Association (ATA) recommends the use of high quality microphones and a speaker in TH consultations to ensure accurate interpretation of both the patient's and the provider's spoken communication. The ATA also recommends that TH users, where available, practical, and affordable have the capability to:

- Display static pictures, diagrams, or objects via document camera or presentation share.
- View and share a computer desktop or applications.
- Play videos or CDs so people at other locations can see and hear them.
- Record meetings when clinically appropriate and with patient permission.
- Share information on a common white board or via computer files.

b. Levels of VTC Equipment. In general, there are three levels of equipment used in the practice of TH:

1) Desktop Video use. Desktop video use is typified by the use of a laptop computer with a video client installed to create a portable VTC system, such as the CISCO Jabber (formerly Tandberg MOVI) or PolyCom Converged Management Application Desktop connected to a Government Furnished Infrastructure. The computer is accessed with a Common Access Card and the video client is login and password protected. The camera operates on a Universal Serial Bus port and includes a built in microphone. The following generic use cases apply to the desktop office use equipment level:

- Provider to provider - administrative consultation;
- Provider to provider - clinical consultation;
- Provider to patient - with local clinical support capability at patient end;

- Fixed camera is acceptable ; Pan-Tilt-Zoom (PTZ) camera quality is not required;
- Recoding is not required;
- VTC systems are portable and configured to work securely from any network.

2) Clinician office use. Clinician office use is demonstrated by provider to patient consultation where a more sophisticated level of VTC equipment, may be justified, than is offered by typical Desktop VTC equipment. The requirement for clinician office use of VTC equipment in the practice of TH should be justified by exception, on case-by-case basis, by the end user and supporting MTF.

- Recoding is required at Provider end;
- PTZ camera is required at one or both ends;
- Other medical equipment is required to provide special video or audio capabilities;

3) Conference room/large audience use. Conference room/large audience use is characterized by administrative use, staff coordination/education, group encounters, and patient outreach/education. VTC equipment used in conference room/large audience use is normally associated with existing multi-use facility VTC equipment with the ability to pan, tilt, and zoom.

c. IP-Based VTC. Connecting over this medium provides for high bandwidth usage. End-users should use a conservative approach, consistent with industry standards for the video call (minimum bandwidth of 384k and preferred bandwidth of 512 kbps), to allow for the smooth and natural communication pace necessary for clinical encounters. The use of lower bandwidths is necessary in some locations due to lack of or expense of broadband access and the need to provide services to disparate and/or remote locations. Devices connected onto this system should be fully documented, under a maintenance agreement, and certified with USAMITC (if the system is used in multi-point calls).

d. Security. RMCs and MTFs providing TH will implement policies, procedures, and technical security measures to guard against unauthorized access to EPHI transmitted over an electronic communications network. HIPAA requires that encryption (128 bit) of EPHI will be addressed and consistent with HIPAA and good practice; video sessions will be secured to the greatest practical extent. Information security must involve all the ways that people handle and access EPHI. The responsibility to secure EPHI extends to all members of an organization's workforce regardless of work location.

e. Service and Property Accountability. RMCs and MTFs providing TH will have processes in place to ensure the safety and effectiveness of equipment through ongoing support and maintenance. When purchased, the TH Service clinical VTC system should usually include a three-year service contract. Usually the supported MTF will be responsible for extending the maintenance contract unless USAMITC assumed responsibility for the purchase, maintenance, and life cycle refresh of specific clinical VTC equipment. Generally, if the TH Service purchases a clinical VTC system for a supported MTF, the system will be transferred to the MTF Property Book, and the MTF will maintain that system beyond the initial service contract.

f. Setup. The RMC TH Service, RMC IT staff, and/or USAMITC will assist MTFs with the initial setup of their clinical VTC equipment. This includes site visits and/or telephone consultations.

g. Troubleshooting. The local IT support or facilitation staff who helped install the systems will be the primary responder. The RMC TH Service may provide backup technical support to all MTFs as needed. The USAMITC call center can be contacted at any time in the troubleshooting process and will provide support if the MTF technical staff or the RMC IT personnel are not available or need assistance. The USAMITC technical support staff will either resolve the problem or coordinate with on-site MTF support personnel to have the hardware RMA for replacement. To call USAMITC for assistance dial 1-800-USAMITC, Opt 2 from 0500 to 1700 Central Monday through Friday.

h. Redundancy. Where possible, MEDCOM MTFs have redundant critical power and network connectivity for critical communications both within the MTF and throughout the Wide Area Network. All MTFs are required to have a Continuity of Operations (COOP) plan for disaster recovery of major network outages. COOP plans must be tested a minimum of once per year to ensure the accuracy

and workability of the recovery plan. A small uninterruptable power supply for the VTC system and network can also provide some redundancy.

i. Ancillary Technical Equipment. Certain ancillary technical equipment is required.

1) The MTF must have an office telephone in the clinical VTC room. The phone facilitates communication with the provider and staff if technical difficulties arise. It also allows the provider to resolve common problems by phone while he/she or the patient manipulates the clinical VTC equipment. Additionally it also provides a backup communication system in case of an emergency.

2) Providers must have access to a computer that is linked to the electronic medical record. It is preferable that the provider has a minimum of two computer screens to view necessary medical information and be able to access other sources of information and computer applications necessary to conduct the session. However, if the provider is using a stand-alone clinical VTC system, one computer screen may suffice.

3) For encounters that require digital images and/or video, the digital device used by a provider requires a minimum of 75 pixels per inch.

4) For a group encounter, the camera should have a zoom capability that can easily allow group observation. For physical exams, an examination table is best. Subspecialty TH services may have specific equipment that is required to maximize the clinical interventions.

5) Where clinically appropriate, MTFs shall consider the use of technologies that can help with visual or auditory impairment. Interviewing techniques shall be appropriate for a patient who may be cognitively impaired or find it difficult to adapt to the technology.

6) Attention should be paid to microphones for both patient and provider facilities. Most room systems include boundary microphones which use a surface, such as a table, to pick up sound and in rooms without conference tables, alternate placement of the microphone has to be tested. For some facilities non-standard microphones may be required to capture accurate audio. In all cases, care must be taken to place the microphones outside of the range of the speakers to avoid echo and room noise from items such as air handlers.

VII. MEASURES OF PERFORMANCE, EFFECTIVENESS, AND COMPLIANCE

1. General

a. There are several measures of compliance for telehealth already published in other policies and guidance. Please refer to the original documents for context.

1) OTSG-MEDCOM Policy Memo 13-009 (Use of Telehealth in the United States Army Medical Command) incorporates several measures of compliance related to emergency management procedures, training, workload accounting and coding, credentialing and privileging, informed consent, licensure, and malpractice. These measures are well-suited to monitoring via SRMC OIP.

2) OTSG-MEDCOM Policy Memo 13-010 (Behavioral Health (BH) Direct Patient Care Performance Guidance for Minimum Capacity) provides behavioral healthcare performance guidance and standards for BH provider availability and the amount of direct care value provided. The standards include those for Tele-Behavioral Health (TBH), an important component of TH clinical encounter volume. These measures will be incorporated into the TH SL data dashboard in future phases of roll-out.

3) The FY14 Performance Planning Guidance incorporates hub utilization metrics for TBH, an important component of TH clinical encounter volume. These measures will be incorporated into the TH SL data dashboard in future phases of roll-out.

MEDCOM Capacity Assessment Reporting Tool (CART) is designed to track MTF compliance with MEDCOM Policy 13-010 for productivity and availability. MEDCOM Behavioral Health Program Office utilizes this tool to make budgetary and staffing decisions. This tool is designed to allow filtering specific to TH providers.

2. Measures of Performance and Effectiveness

a. Production

1) Number of encounters (source: M2)

2) Number of sites (source: M2 / USAMITC)

3) Beneficiary categories (source: M2)

b. Execution

1) eRVU / encounter (source: M2)

c. Efficiency – to be published (TBP)

d. Effectiveness – TBP

3. Measures of Compliance: OTSG-MEDCOM Policy Memo 13-009 - Refer to OTSG-MEDCOM Policy Memo 13-009 (Use of Telehealth in the United States Army Medical Command) for measures of compliance relative to:

a. Emergency management procedures

b. Training

c. Workload accounting and coding

d. Credentialing and privileging

e. Informed consent

f. Licensure

g. Malpractice

4. Measures of Compliance: OTSG-MEDCOM Policy Memo 13-010 – Refer to OTSG-MEDCOM Policy Memo 13-010 (Behavioral Health (BH) Direct Patient Care Performance Guidance for Minimum Capacity)

5. Measures of Compliance: FY14 Performance Planning Guidance - In FY14, TBH utilization will be monitored in quarterly performance reviews. Targets are to be established for the TBH Hubs. MTFs are required to set their own targets:

APPENDIX A - SRMC MTF SOP GUIDANCE

All SRMC MTF TH SOPs will include at a minimum the following topics:

a. Specific TH Services offered:

1) Specific synchronous TH services offered at the MTF

2) TH services listed by MTF providing and receiving the services (e.g. MACH to BJACH: TBH)

b. Requirements:

1) Clearly described roles and responsibilities of the MTF staff described in relation to RMC and tele-provider roles and responsibilities. The MTF shall ensure that appropriate staff is available to meet patient and provider needs before, during, and after TH encounters of all types.

2) Any MTF-specific documents required on a routine appointment basis that were not included in the “Support from MTFs” section in the MEDCOM TH SOP or the RMC Annex

3) Procedures for obtaining and sharing consents for treatment and services in support of patient encounters conducted via TH, as well as procedures for refusals to sign consent forms.

4) Any additional RMC procedures for sharing TH patient information.

5) Description of roles, responsibilities (e.g. daytime and after hours coverage), communication, and procedures around emergency issues at the MTF. The description will establish the need for a designated licensed provider with published contact information that is available at the site where the service member is located. All MTF SOPs will provide such a description for a situation in which a patient becomes severely agitated potentially posing a threat to self or others during a routine TH appointment (and the situation therefore becomes an emergency). If the MTF offers emergency TH services (i.e. a patient presents as an emergency), then the MTF SOP will also provide written protocols to support emergency TH services.

6) MTF protocol(s) for psychiatric admissions to either civilian or military facilities, including an explanation of how it pertains to TH.

7) Local civil commitment regulations.

8) Clearly defined role, responsibilities, and procedures around patient safety issues related to continuity of care (e.g. procedures a tele-provider should follow if they determine that a patient requires a face-to-face encounter or other in-person attention at the patient site for safety reasons).

9) Decision on whether the Commander of the MTF receiving services agree to allow trainees to provide TH services.

10) Any additional RMC guidelines regarding ordering of prescriptions and laboratory orders, as well as reporting adverse events.

c. Limitations:

1) Any MTF-specific limitations on the use of TH.

2) Any MTF-specific limitations on the availability or non-availability of emergency TH services (i.e. patient presents as an emergency, as opposed to a patient decompensating during a routine TH appointment and the situation becomes an emergency)

d. Additional regulation:

Any applicable MTF-specific regulation not covered above.

Appendix M: Suicide risk management during clinical telepractice (14)

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SUICIDE RISK MANAGEMENT DURING CLINICAL TELEPRACTICE*

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ABSTRACT

The effective assessment and management of suicidal patients is an essential component of telehealth-based care. With this article, we describe how we have implemented procedures for the ongoing assessment and management of suicide risk in a clinical trial that compares in-office treatment to home- based treatment delivered via web-cam to U.S. military service members and veterans with depression. We describe our safety protocol and how it was adapted from current recommended best practices, published guide- lines, and local requirements for managing patient safety during home-based telepractice. We conclude with discussion of other key safety issues asso- ciated with telepractice. The topics discussed are relevant to all mental health practitioners who are interested in clinical telepractice services.
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Key Words: suicide risk, patient safety, risk management, telehealth, telemedicine

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Safety Protocol

The essential components of our safety protocol planning steps and processes are shown in Table 1. The safety protocol was designed in accordance with the professional guidelines and best practices literature available at the time [5, 7] and is consistent with the most recent applicable guidelines from both the American Telemedicine Association [18] and American Psychological Association [4]. Our safety protocol was made into a formal written plan that is part of our trial's research protocol.

The development of our safety protocol began with review of applicable local regulatory requirements and guidance. Our study clinicians (clinical psychologists) are credentialed providers at Federal facilities; Madigan Army Medical Center (MAMC) and Portland VA Medical Center (PVAMC). Thus, the standard operating procedures (SOP) of the Army and PVAMC were reviewed and included in our plan. This review included examination of duty-to-warn and mandated safety reporting requirements. For active-duty military personnel, their command must be notified when the service member's safety is a concern. Thus, these patients are asked to provide command contact information. The use of support persons is a recommended approach to telehealth safety planning [5, 7]. Depending on the type of clinical setting, an additional support person to assist with coordination in emergencies could include another treatment provider, other designated staff at the patient site, a family member, or a local community contact who knows the patient and agrees to remain reachable during telehealth sessions [19]. Thus, we ask patients at both sites to identify another person (e.g., family member, partner, or friend) who can be notified in case of an emergency. Patients at both sites are asked to complete a site specific release of information form so that the third party can assist in cases of emergency or imminent risk. These processes are discussed with our patients during the informed consent process upon entry into the clinical trial.

Screening and Assessment

Telepractice guidelines uniformly urge clinicians to determine appropriateness of each patient for telehealth care prior to initiating services [4, 5]. "Appropriateness" varies across contexts based on several factors including technology considerations, patient needs and preferences, and administrative regulations [1, 7]. In mental health care, suicide risk assessment is a critical aspect of determining appropriateness for varied treatment modalities. In our trial, suicide risk assessment begins during the initial in-person screening of patients. We first administer

Table 1. Overarching Safety Plan Steps and Process

Safety planning step	Process
Practice within institutional rules, regulations, and state laws	• Review local and health systems regulations. • Providers receive training and supervision on pertinent institutional and legal regulations for providing telehealth-based care.
Determine appropriateness of telehealth-based care	• Conduct pre-treatment clinical assessment and suicide screen to determine risks, contraindications, etc.
Ensure adequacy of home-environment, technology, and devices	• Test infrastructure for adequate bandwidth. • Assess quality of environment (e.g., sound, lighting, privacy, etc.) and equipment (e.g., computer, microphones, cameras, etc.). • Ensure tech support plan and materials (troubleshooting guides). • Plan for maintaining privacy at patient's end.
Conduct site assessments and establish procedures	• Obtain alternative contact numbers from patient. • Obtain patient's local emergency contact information and confirm with EMS agency (using non-emergency line). • Identify local collaborators (e.g., Patient Support Person) that can be called to support patient safety during crisis. • Obtain needed authorizations to release information. • Provider ensures that he/she has access to a secondary phone line in the clinical room during appointments. • Have secondary staff available during appointments to coordinate with EMS, if needed.
Discuss roles and responsibilities with patient	• Discuss technical troubleshooting with patient and have an agreed upon method for re-establishing contact during service disruption (e.g., via telephone).
Evaluate patient risk during and after treatment	• Monitor psychiatric symptom levels. • Assess for presence and/or change in suicidality. • Monitor relevant changes in patient's home environment. • (*If indicated by risk level*) Develop multi-step safety plan and provide patient with a copy of the plan. Lead a direct and candid discussion about patient's access to firearms or other lethal means, and generate strategies to restrict access. Determine how transportation, if necessary, will be handled and whether to utilize a local collaborator. • (*If indicated by risk level*) Try to remain connected to patient via VTC while coordinating involvement of EMS by telephone. Involve secondary staff and notify third parties as warranted.

Note: This list is based on that presented by Luxton and colleagues [7].

the Structured Clinical Interview for the DSM-IV Axis I Disorders, Research Version, Patient Edition (SCID-I/P) [20] to determine initial study eligibility and to screen for current suicidal ideation and past self-injurious events. Potential patients are ineligible for the trial if they report a suicide attempt during the past 6 months or if they have current ideation with stated intent. These exclusion criteria may eliminate the highest risk patients that are encountered in other clinical settings; however, these exclusion criteria were deemed necessary for this study because home-based care is not the standard of care in our setting (and thus deemed experimental by our IRB).

As part of our overall safety plan, we use the Standard Operating Procedure (SOP) for the Assessment and Management of Suicide and Homicide Risk in Active Duty Service Members that is used at MAMC [21]. This official SOP was updated during the course of our study, therefore we updated our procedures to remain consistent with the SOP. The SOP is based on information from several sources including the VA/DoD Clinical Practice Guidelines for Assessment and Management of Patients at Risk for Suicide [22], U.S. Air Force Guidelines for managing suicide behavior [23], and several other DoD policies and procedures. The same SOP guides assessments completed in-person or during telehealth sessions.

The SOP specifies a five-step process. Step one consists of a screen for the presence of suicidal, violent, or homicidal ideation, intent, or behavior. If the screen suggests presence of any risk, a full assessment interview is administered (step two) that assesses for frequency, intensity, and duration of ideation, content of thoughts and/or plans, impulsivity, history of suicidal and violent behavior, and other warning signs, risk, and protective factors. At the third step, clinicians integrate all information gathered from the assessment interview and compare that information to the SOP's guidelines in order to arrive at and document the current level of risk (i.e., not at elevated risk, low risk, intermediate risk, or high risk). The general descriptions of the levels of risk and associated clinical interventions specified in the SOP are shown in Table 2. In step four, clinicians are to document and provide rationale for the clinical responses provided. Finally, in step five of the risk assessment, clinicians develop and document safety plans with all patients with any elevation of risk. Safety plans can vary based on idiographic factors; however, the SOP encourages use of a safety plan to assist patients in identification of healthy coping strategies to be used when distressed, people to contact for additional support, ways to reduce risk in their environments (i.e., limiting substance use and restricting access to means), emergency/crisis response contact numbers, and making a commitment to living and to engage in treatment.

In our trial, the suicide risk assessment SOP is administered both at the intake/screening assessment and again during the first treatment session. It is also administered during subsequent assessment and/or treatment sessions as needed. That is, if a patient were to indicate a change in the severity or frequency of

Table 2. Determination of Suicide and Homicide Risk Level

Risk level	Criteria used to determine risk[a]	Clinical response[b]
Not at elevated risk	Denial of recent violent or suicidal ideation, intent, plans, or preparations. No history of violent behavior or suicide attempt in the previous 2 years.	No change necessary in routine outpatient clinical practice. Provide contact information for emergency responders. May consider devising safety plan for highly distressed patients.
Low risk	Endorsement of recent violent, homicidal, or suicidal ideation without intent to act or devise. Frequency and duration of ideation is low. No evidence of preparations or difficulty controlling impulses. No violent behavior or suicide attempt in the previous year.	Establish a safety plan with patient that addresses coping strategies, contact information for social supports, means restriction and limiting of substance use, and emergency contact information. Elicit a commitment to living and to engaging in treatment.
Intermediate risk	Endorsement of current homicidal or suicidal ideation without intent to act or difficulty controlling impulses. Frequency and duration of ideation is moderate to high. No recent violent behavior, suicide attempt, or preparations.	Take precautions of low risk and consider increasing frequency and/or intensity of contact to ≥ one time per week. Engage in peer consultation to share and track decision-making process and determine need for internal and external reporting/disclosures and means restrictions.
High risk	Endorsement of persistent homicidal or suicidal ideation with a plan or intent to act on a plan, and difficulty controlling impulses. Or, recent violent act, suicide attempt, or preparations.	Engage lower level precautions (including development of detailed safety plan with means restriction) and increase treatment intensity. Strongly consider implementing emergency response to arrange for safe transport of patient for evaluation and possible inpatient hospitalization. Initiate reporting/disclosure processes as indicated.

Note: The contents of this table are based on the MAMC risk assessment SOP [20].
[a]In addition to these criteria, clinical judgment is used to integrate additional known risk factors (e.g., agitation, significant psychosocial stressors, hopelessness) and protective factors (e.g., interpersonal connections, help seeking, optimism) to ultimately arrive at and document a current risk-level determination. Further, if a patient has greater than one previous suicide attempt or violent act, risk level automatically advances at least one level. [b]These clinical responses reflect the minimum indicated response. Clinical judgment is always part of risk evaluation and clinicians may elect to engage a higher level of intervention if deemed appropriate.

suicidal ideation, the treatment provider would again assess for suicide risk per the SOP. If a patient is assessed to be at not elevated or low risk, s/he would not be assessed again until the final treatment session. Patients at or above intermediate risk are assessed during each treatment session until level of risk decreases below the intermediate risk threshold.

Patient Monitoring and Telehealth Session Checklist

As part of the clinical assessment battery in our trial, patients are asked to complete the Beck Depression Inventory-II (BDI-II) [24] during the clinical outcomes assessments and to complete the Patient Health Questionnaire (nine item) [25] before each treatment session. During telehealth sessions, patients provide their responses to the self-report items verbally and the clinicians record the responses in the patient's treatment folder (clinical chart notes). These assessment measures provide a method for regular monitoring of clinical symptom levels and the presence of and/or change in suicide risk throughout treatment.

For all patients, regardless of their initial risk level determination, ideation and other signs of risk for suicide and violence are documented by study clinicians via a treatment session checklist. Our telehealth treatment session checklist was developed in part to provide clinicians with specific patient safety and suicide risk assessment, monitoring, and documentation procedures. The complete checklist used in the current study is published elsewhere [16]; however, its components and rationale are summarized as follows. The checklist begins with a verification of patient location and contact information. Prior to the first session, study clinicians obtain contact information for local emergency services based on patient's place of residence. Patients are also asked whether they feel that their home environment is safe and private. Additional questions assess whether the patient appeared intoxicated or otherwise disheveled, distressed, or upset; suicidal desire and ideation, such as whether the patient showed any signs of suicidal ideation or self-harm behavior; and plans and preparatory behavior, such as whether a weapon (firearm) was observed in the patient's home.

Risk Escalation and Continuity of Care Procedures

For the purposes of our trial, if a study clinician observes a significant elevation in patient risk for suicide or violent behavior, the clinician is to immediately notify a supervisory psychologist who assists in determining what additional steps of the safety protocol are appropriate. Although determining the most appropriate clinical response for a given patient requires consideration of multiple factors, our safety protocol specifies minimum levels of intervention to be offered at each risk level. For example, at any time an assessment yields a risk level determination beyond no elevated risk, clinicians are expected to collaboratively develop a detailed safety plan with the patient, which may include identification of

safe coping strategies, working with the patient to remove lethal means (e.g., storing firearms in secured locations) and involving support persons with the plan.

While safety plans are familiar to many clinicians, providing patients with a copy of the plan during telepractice necessitates additional consideration. In our trial, telehealth patients are provided with blank copies of our safety plan at their in-person intake assessments so that the plans are available for use throughout treatment. In the event a telehealth patient does not have a blank copy of the safety plan, clinicians collaborate with the patients via telehealth in the drafting of a safety plan and then, once drafted, review the contents with the patient and allow the patient to indicate their comfort and agreement with the plan. Clinicians then mail a hard copy and/or scan and e-mail a copy of the plan to the patient. As with conventional in-office care, if a patient is assessed to be at high risk during a telehealth session, clinicians are expected to consider coordinating an evaluation of the patient for possible hospitalization. By gathering contact information for local emergency services and command, and identifying an emergency contact on behalf of the patient at the outset of telehealth services, our safety protocol is designed to enable clinicians to efficiently and effectively coordinate safe transport and evaluation of high risk patients.

We also have preplanned procedures in place to assure continuity of care for when patients complete treatment, are referred but do not enroll in treatment, or if they leave treatment early. To begin, we work with each patient to establish a continuity of care plan. This involves discussing with patients what may be the best options for them given their preferences and clinical needs. We also facilitate coordination with the initial referring care providers or other mental health professionals as appropriate. In addition, we provide all of our patients (regardless of risk level) with a list of local community mental health resources that they may keep as a reference. We follow-up with patients and/or the referring care providers when necessary and document as appropriate. Our continuity of care process helps to assure patient safety after they leave our care.

SUMMARY

Our safety protocol and suicide risk assessment procedures include gathering patient information so that we can make informed risk assessments and enact indicated, effective responses to psychiatric emergencies. While the patients in our study may be at somewhat lower risk for suicide than other clinical patient populations because of our prescreening criteria, we have encountered patients ranging from low to high risk. The majority of our patients in the in-home treatment condition (n = 20 at the time of this writing) began and ended treatment identified as "not at elevated risk" for suicide. The next most frequent risk category for our in-home patients has been low (n = 6 at initial treatment session). In each of these cases, the patient endorsed a history of suicidal thinking with limited frequency, intensity, and duration, with no or limited plans and no

preparatory behavior, and few other risk factors identified. We have had three patients receiving care in the home who were identified as intermediate risk for suicide during their initial risk assessment. For each of these cases, the steps to take in the event of increased suicide risk were discussed with the patients. We have also experienced one case that escalated from "low" to "high risk" and one patient that was assessed to be "high risk" during our initial assessment. For both of these cases a "warm hand-off" was made to a supervisory clinician for further risk assessment. Given the high level of risk in these cases, the clinician discussed voluntary hospitalization with these patients and, on both occasions, the patients agreed that presenting to inpatient behavioral health for evaluation was the best option. Per U.S. Army regulations, the study staff contacted the Soldiers' unit commanders and requested escorts to transport the patients to the ED. One evaluation resulted in inpatient admission; the other did not, although it did result in increased intensity of care. In all cases, we have successfully managed suicide risk by following pre-planned recommended procedures. Our work demonstrates that with appropriate planning and training, patient safety can be effectively managed during telepractice, even when patients are in settings that are not supervised by clinical staff (e.g., their own home).

One of the principal concerns regarding safety management during telehealth is how to effectively manage a suicidal patient when the telehealth connection is lost or disconnected during a clinical encounter. In our trial there have not been any situations where technology failures caused any difficulties with risk assessment, monitoring, or intervention procedures. However, consistent with practice recommendations and guidelines, we are careful to collect alternate methods of contact in case the videoconferencing connection is lost. We also identify a support person who can assist in an emergency. It is also important to tailor safety plans to the specific situations that may be encountered, particularly if patients are located in another geographical or jurisdictional area. Having knowledge of the requirements for civil commitment and *Tarasoff* type duty to warn/protect and incorporating these elements into your safety plan is essential. Even at a local level, simple safety procedures, such as what number to contact for emergency response services may vary based on geographic region.

Suicide risk assessment should be an ongoing process as risk levels are fluid and risk determination is based on integration of multiple pieces of information and clinical judgment [2, 26]. While assessment guidelines and checklists may enhance the standardization of the assessment process and reduce errors, suicide risk is conceptualized as existing along a continuum from no significant risk to imminent risk and it is the clinician who is ultimately charged with integrating present and historical information, considering the duration and severity of explicit and implicit risk factors, and differentially weighting risk and protective factors to arrive at a clinical determination [2, 26]. Maintaining a comprehensive risk management or safety protocol that guides the assessment process, encourages consultation with colleagues and supervisors, and informs clinical

decision making can reduce patient and clinician anxiety, enhance accuracy and reliability of the assessment, and thereby, supports patient safety [27].

Safety planning with patients during telepractice may also carry additional clinical benefits [28]. For example, the process of working collaboratively with patients to establish a safety plan for telehealth encounters may provide the patient with increased confidence and therefore contribute to improved comfort and acceptance of the treatment process. Discussion of technical procedures as well as initial testing of telehealth equipment may also help to facilitate a collaborative therapeutic relationship. In some cases, the involvement of a family member or other supportive person during technical set-up and as part of safety planning may help facilitate patient support and overall treatment adherence. Of course, it is necessary to consider the preferences of patients, their autonomy, and privacy risks when involving others in their care. Telehealth capabilities also provide increased access to care, especially for patients who reside in remote or underserved areas. For these patients, access to care via telehealth services may be critical for ongoing treatment of suicidality, including assessment, intervention, medication management, and follow-up care.

In conclusion, telehealth is a growing area of practice that provides opportunities to increase access to care, improve convenience, and expand the range of clinical services. The effective assessment and management of patients experiencing a psychiatric crisis raises important legal, operational, and clinical issues that telepractitioners must be cognizant of. These issues, however, should not dissuade practitioners from clinical telepractice. With appropriate safety planning, training, and familiarity with published guidelines, telepractice is as feasible as traditional in-office clinical care delivery.

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