

DoD Telemental Health Guidebook

Second Edition

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National Center for Telehealth & Technology (T2)
Defense Centers of Excellence for Psychological Health & TBI (DCoE)

www.t2health.org



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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We would like to acknowledge the significant contributions of the American Telemedicine Association Telemental Health Special Interest Group, the Department of Defense Service Branches, and the Veterans Health Administration for developing many of the telemental health resources to date. We relied on many of the existing standards, guidelines, and manuals when writing this guidebook.

Gregory Kramer, JD, PhD and Matt Mishkind, PhD led development of this manual and would like to thank all the former and current THP staff members for their invaluable contributions.

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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 in 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-M¹⁴ 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

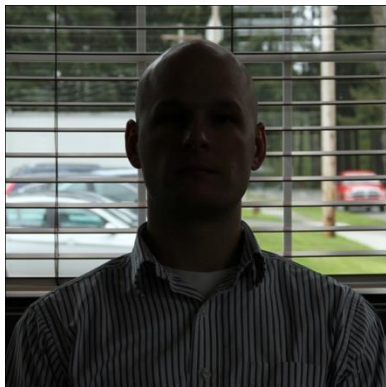
The physical environments at both the originating and distant site are clinical environments and the spaces should reflect that. The location of the room for the encounter at both ends should ensure comfort, privacy, and confidentiality. Both visual and audio privacy are important, and placement and 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

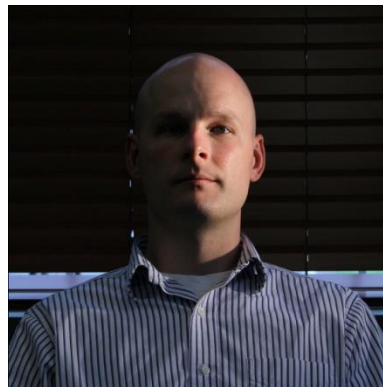
Lighting

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



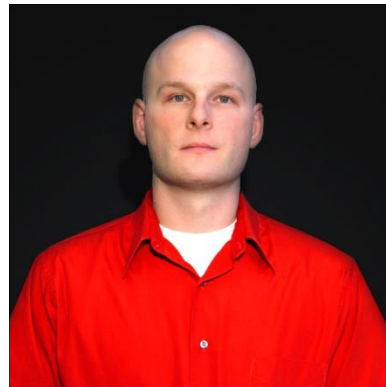
Example 4: Appropriate Lighting

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.

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- ²⁰ DoD 6025.13-R, Military Health System (MHS) Clinical Quality Assurance (CQA) Program Regulation, 11 Jun 04
- ²¹ 10 U.S.C. 1094(d) (as amended by Section 713 of the National Defense Authorization Act for Fiscal Year 2012)
- ²² Waiver of Restrictive Licensure and Privileging Procedures to Facilitate the Expansion of Telemedicine Services in the Military Health System, signed by the Assistant Secretary of Defense (Health Affairs), December 21, 2012.
- ²³ Department of the Army OTSG/MEDCOM Policy Memo 13-009, 20 Feb 2013, Use of Telehealth in the United States Army Medical Command (MEDCOM)
- ²⁴ 42 CFR Part 482 and 485, Medicare and Medicaid Programs: Changes Affecting Hospital and Critical Access hospital Conditions of Participation: Telemedicine Credentialing and Privileging, published May 5, 2011, Federal Register, Vol. 76, No. 87
- ²⁵ Military Health System Coding Guidance: Professional Services and Specialty Coding Guidelines, Version 3.6, Unified Biostatistical Utility, 1 March 13
- ²⁶ Brooks, E., Spargo, G., Yellowlees, P., O'Neil, P., & Shore, J.H. (2013) Integrating culturally appropriate care into telemental health practice. In Myers, K.M. & Turvey, C.L. (Eds.), *Telemental Health: clinical, technical, and administrative foundations for evidence-based practice*. (pp. 63-82). London: Elsevier.

²⁷ American Academy of Child and Adolescent Psychiatry, Practice Parameter for Telepsychiatry with Children and Adolescents, (December 2008), available at <http://www.aacap.org/galleries/PracticeParameters/Telepsychiatry.pdf>

Appendix A – T2 Telemental Health VTC - Basic Equipment Troubleshooting Checklist

Check <input checked="" type="checkbox"/>	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?		
<input checked="" type="checkbox"/>	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?		
<input checked="" type="checkbox"/>	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?		
<input checked="" type="checkbox"/>	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 C – Waiver of Restrictive Licensure



HEALTH AFFAIRS

THE ASSISTANT SECRETARY OF DEFENSE

1200 DEFENSE PENTAGON
WASHINGTON, DC 20301-1200

DEC 21 2012

MEMORANDUM FOR ASSISTANT SECRETARY OF THE ARMY (MANPOWER AND RESERVE AFFAIRS)
ASSISTANT SECRETARY OF THE NAVY (MANPOWER AND RESERVE AFFAIRS)
ASSISTANT SECRETARY OF THE AIR FORCE (MANPOWER AND RESERVE AFFAIRS)
COMMANDER, JOINT TASK FORCE NATIONAL CAPITAL REGION-MEDICAL

SUBJECT: Waiver of Restrictive Licensure and Privileging Procedures to Facilitate the Expansion of Telemedicine Services in the Military Health System

- References:
- (a) Department of Defense 6025.13-R, "Clinical Quality Assurance in the Military Health System," June 11, 2004
 - (b) Title 10, United States Code, Section 1094(d) (as amended by Section 713 of the National Defense Authorization Act for Fiscal Year 2012)
 - (c) Title 32, United States Code, Section 502(f) (2011)
 - (d) The Joint Commission Comprehensive Accreditation and Certification Manual, July 1, 2012 (see Standard Medical Staff 13.01.01 titled "Telemedicine")
 - (e) Sections 482.12(a)(1) through (a)(7) and 482.22(a)(1) through (a)(2) of Title 42, Code of Federal Regulations (Regulations of the Centers for Medicare and Medicaid Services)
 - (f) American Telemedicine Association, www.americantelemed.org, "Telemedicine Standards & Guidelines," current edition
 - (g) American Telemedicine Association, "Practice Guidelines for Videoconferencing-Based Telemental Health," current edition

In order to facilitate the expansion of telemedicine services in the Military Health System, this memorandum waives selective provisions of Reference (a). This waiver is conditioned on the specific provisions of this memorandum, and shall remain in effect, unless modified or revoked, until the cancellation and reissuance of Reference (a), or the issuance of a Department of Defense (DoD) Instruction for or including telemedicine.

A. Portability of State Licensure for Telemedicine Providers.

The requirements of Chapter 4 of Reference (a) that health care providers who are not members of the Armed Forces must have a local license in order to carry out official duties off-base is waived for purposes of performing authorized telemedicine services. Portability of state licensure regulations for members of the Armed Forces is expanded per Reference (b).

Licensed health care providers who are not members of the Armed Forces but who are performing authorized telemedicine duties consistent with Reference (b) are granted this waiver, subject to the following limitations:

1. The health care provider must be a civilian employee of DoD, DoD personal services contractor, a member of a non-DoD Uniformed Service assigned to DoD, a civilian employee of the Department of Veterans Affairs (VA), or a member of the National Guard performing training or duty under section 502(f) of Title 32 (Reference (c)) in response to an actual or potential disaster. This waiver does not cover non-personal services contractor personnel.
2. The health care provider must meet the same qualifications that apply to Active Duty personnel under paragraph C4.2.2 of Reference (a) and are subject to the same investigations and reports procedures as apply to military personnel under paragraph C4.2.4 of Reference (a).
3. Requirements to notify State Licensing boards per section C4.2.3.1 of Reference (a) are waived when services are provided via telemedicine.

B. Clinical Privileging for Telemedicine Providers.

For facilities that grant clinical privileges, the requirements of section C4.4 of Reference (a) for credentialing and granting of clinical privileges are modified such that the privileging authority of the facility where the patient is located ("originating site") may choose to rely on the credentialing and privileging determinations of the facility where the provider is located ("distant site") to make local privileging decisions. This is known as "privileging by proxy," and decisions must incorporate applicable standards as identified by Reference (d) to include requirements of the originating site to make final privileging decisions. These modifications are conditional on the following:

1. The originating and distant site facilities are accredited by the Joint Commission, the Accreditation Association for Ambulatory Healthcare, or other appropriate accrediting entity designated by the Chief Medical Officer of TRICARE Management Activity. Hospitals must meet the standards in Reference (d) for privileging by proxy.
2. The distant site provider is privileged at the distant site facility to provide the identified services and is authorized to provide telemedicine services. The provider must request to the originating ("patient") site facility permission to use current privileges to provide care to patients in the originating site. The request must be appropriately documented. The distant site facility must provide at a minimum a copy of the distant site provider's current list of credentials, privileges, and proof of Health Insurance Portability and Accountability Act training.
3. The originating ("patient") site facility has evidence of periodic internal reviews of the distant site practitioner's performance of these privileges and receives such performance information, including all adverse events resulting from telemedicine services, for use in the periodic appraisals.

4. The privileging authority of the originating site may choose to use the Interfacility Credentials Transfer Brief (ICTB) as a source to rely upon the credentialing and privileging determinations of the distant site.

5. If the distant site facility is not a Military Treatment Facility (MTF) or VA hospital, or otherwise does not have access to ICTB, its medical staff credentialing and privileging process and standards at least meet the standards at Reference (e).

C. Additional Conditions.

The use of an originating or distant site that is not a MTF or VA medical facility, but is an installation, armory, or other non-medical fixed DoD location, a DoD mobile telemedicine platform, or a civilian sector hospital, clinic, or TRICARE network provider's office, is permissible under this memorandum unless restricted by the Surgeon General or designee(s) concerned, or Commander, Joint Task Force-National Capital Region Medical Command. Prior to engaging in telemedicine services, the applicable medical command(s) must ensure with respect to originating and distant sites and the providers involved that:

1. Patients and providers are provided with a secure and private setting.
2. Arrangements have been made for appropriate clinical support, including access by local emergency services, should the need arise.
3. The facilities and providers meet applicable telecommunication and technology guidelines of the American Telemedicine Association (References (f) and (g)).


Jonathan Woodson, M.D.

cc:
Surgeon General of the Army
Surgeon General of the Navy
Surgeon General of the Air Force
Joint Staff Surgeon
Under Secretary of Veterans Affairs for Health
Chief Medical Officer, TRICARE Management Activity

Appendix D – AAAHC Approval for Privileging by Proxy



May 22, 2012

Matt C. Mishkind, Ph.D.
Research Psychologist | Program Lead
Clinical Telehealth Division [cTH]
National Center for Telehealth and Technology [T2]
9933 West Hayes Street
Joint Base Lewis-McChord, WA 98431
Tacoma, WA 98431

Dear Dr. Mishkind:

In your memo dated March 28, 2012, you requested AAAHC formally allow for "privileging by proxy" for telehealth providers.

The AAAHC Standards and Survey Procedures Committee reviewed the criteria outlined in your memo. There are no specific standards at this time that specifically reference telehealth services, but the committee determined that "privileging by proxy" of telehealth services is acceptable. This allows the site that will receive the telehealth services (originating site) to use credentialing and privileging information of the distant site facility to "privilege by proxy" if the following conditions are met including:

- a) there is a written agreement in place to do this between the sites;
- b) the distant site is a Medicare-participating provider/supplier;
- c) the distant site provider is privileged at the distant site hospital, with the distant site hospital having a list of privileges;
- d) the distant site provider holds a license issued or recognized by the State that is receiving the telemedicine services; and
- e) the originating site hospital must have evidence of internal review of the distant site provider's performance, including any adverse events and complaints.

We appreciate you seeking guidance on such a unique and ever evolving practice. We would be very interested in the outcome of your program and the practical implications of these guidelines. Telemedicine is an area that is becoming more common and as we near the time to develop generalized standards we would appreciate a report as to how well this works.

Sincerely,

A handwritten signature in black ink, appearing to read "Frank Chapman", written over a horizontal line.

Frank Chapman, MBA
Chair

Appendix E – Clinical TMH Checklist

Preparing Your Equipment Prior to a Session	
Technical Setup	Laptop on and logged in
	Test the connection
	Remove Lens Cap
	Find IP address
	Make/Model of equipment
	Launch Software
	Install headphones
	Have Tech Service contact information readily available
	Update Address Book

Introducing Patient To Telehealth	
Consent	Why telehealth?
	Recorded or not?
	Reassure that they are receiving quality of care
	Emphasize confidentiality and privacy
	Review the TBH consent form with the SM and answer any questions that remain
	Options for face-to-face meetings if available
	Go over patient concerns
Screening	Assess patient for sign of instability - communicate any concerns for providing TH session to provider
Patient Education	Inform patient about procedures if technical difficulties occur
	Operational Security
	Emergency procedures
	Identify Emergency contact list

Conducting a Clinical Session	
Image/Sound Configuration	Place Call/Receive Call
	Adjust the Volume
	Adjust the Video Settings - Brightness, Hue, Contrast
	Adjust Camera - Zoom, PIP, Set to correct level
	Pan around the room
Begin Session	Introduce everyone in the room at the start of the encounter
	Inform patient that the connection is on a secure network
	Operational Security
	Go over emergency procedures
	Identify Emergency contact list
Rapport Bldg	At each session assess the patient's comfort with TBH. Answer any questions or concerns
	Eye contact
	Avoid distracting behavior -excessive movement, facial expressions, hand gestures, phone noise
If Lost Connection Occurs	Use PiP
	Re-establish the connection by placing the call again
	If that fails then reboot the computer

Environmental Considerations	
Lighting	How is the lighting in your room and patient's room? Shadows?
	Can you clearly see faces (prov/pat.)
Background	How do you optimize the background behind yourself? Distractions (clutter, background objects and color)
Clothing	How does your clothing affect the image? What are optimal colors and patterns? Can you adjust your uniform or wear a lab coat?
Accessories	Eliminate distractions caused by accessories (watches, velcro, phones)