



PERSONNEL AND
READINESS

OFFICE OF THE UNDER SECRETARY OF DEFENSE
4000 DEFENSE PENTAGON
WASHINGTON, D.C. 20301-4000

OCT 17 2017

The Honorable William M. "Mac" Thornberry
Chairman
Committee on Armed Services
U.S. House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

The enclosed report responds to section 718(e)(1) of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114-328), which requires an initial report no later than 180 days after enactment, describing the full range of telehealth services to be available in the direct care and purchased care components of the Military Health System (MHS), and any copayments or cost shares associated with those services. This section also requires that the initial report include a plan to develop standardized payment methods to reimburse health care providers for telehealth services provided to covered beneficiaries in the purchased care component of the TRICARE program. An interim report was submitted on May 22, 2017.

The MHS has long recognized the value and strategic importance of telehealth services in supporting a medically ready force and a ready medical force. Great strides have been made in the development and implementation of telehealth through cooperation between Army, Navy, Air Force, and the Defense Health Agency. Telehealth will continue to be leveraged in support of the Quadruple Aim to improve readiness, enhancing population health, advancing health outcomes, and reducing health care costs. The MHS will continue to improve and expand telehealth services consistent with advancements in technology through sustained collaboration between the Components in order to provide a superior health care delivery system to our beneficiaries.

A similar letter is being sent to the Chairman of the Committee on Armed Services of the Senate. Thank you for your interest in the health and well-being of our Service members, veterans, and their families.

Sincerely,

A handwritten signature in blue ink that reads "A. M. Kurta".

A. M. Kurta
Performing the Duties of the Under Secretary of
Defense for Personnel and Readiness

Enclosure:
As stated

cc:
The Honorable Adam Smith
Ranking Member



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OFFICE OF THE UNDER SECRETARY OF DEFENSE
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OCT 17 2017

The Honorable John McCain
Chairman
Committee on Armed Services
United States Senate
Washington, DC 20510

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A. M. Kurta
Performing the Duties of the Under Secretary of
Defense for Personnel and Readiness

Enclosure:
As stated

cc:
The Honorable Jack Reed
Ranking Member

**Report in response to Section 718 of the National Defense Authorization Act for Fiscal
Year 2017 (Public Law 114–328)**



Enhancement of Use of Telehealth Services in the Military Health System

The estimated cost of this report for the DoD is approximately \$39,000.00 for the 2017 Fiscal Year. This includes \$5,500.00 in expenses and \$34,000.00 in DoD labor.

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EXECUTIVE SUMMARY

The Military Health System (MHS) has long recognized the value and strategic importance of the incorporation of telehealth (TH) services in order to support a medically ready force and a ready medical force. Great strides have been made in the development and implementation of TH within the Department of Defense (DoD) due in large part to the cooperation between Army, Navy, Air Force and the Defense Health Agency (DHA). The continued leveraging of TH will address the Quadruple Aim of improving readiness, enhancing population health, advancing health outcomes, and reducing health care costs. In accordance with the requirements in section 718 of the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2017 (Public Law 114–328), “Enhancement of Use of Telehealth Services in the Military Health System,” this report will describe the full range of TH services to be available in the MHS, including those services currently available, as well as those expected to be functional, by June 2018. For the purchased care component, this also includes the co-payments and cost shares associated with those services and plans for reimbursement of TH services.

SUMMARY OF SECTION 718 OF THE NDAA FOR FY 2017

Section 718 of the NDAA for FY 2017 requires that, not later than 18 months after the date of the enactment of the Act, the Secretary of Defense shall incorporate the use of TH services throughout the direct care and purchased care components of the MHS, including mobile health applications to: (a) improve access to primary care, urgent care, behavioral health care, and specialty care; (b) perform health assessments; (c) provide diagnoses, interventions, and supervision; (d) monitor individual health outcomes of covered beneficiaries with chronic diseases or conditions; (e) improve communication between health care providers and patients; and (f) reduce health care costs for covered beneficiaries and the DoD.

Section 718 also stipulates the TH services required to be incorporated shall include those TH services that: (a) maximize the use of secure messaging between health care providers and covered beneficiaries to improve the access of covered beneficiaries to health care and reduce the number of visits to medical facilities for health care needs; (b) allow covered beneficiaries to schedule appointments; and (c) allow health care providers, through video conference, telephone or tablet applications, or home health monitoring devices to assess and evaluate disease signs and symptoms, to diagnose diseases, to supervise treatments, and to monitor health outcomes.

For the purchased care component, section 718 requires that an item or service furnished to a covered beneficiary via a telecommunications system shall be covered under the TRICARE program to the same extent the item or service would be covered if furnished in the location of the covered beneficiary. Furthermore, it requires development of standardized payment methods to reimburse health care providers for TH services provided to covered beneficiaries in the TRICARE program, including the use of reimbursement rates that incentivize the provision of TH services. Finally, the Act requires the reduction or elimination of copayments or cost shares for covered beneficiaries in connection with the receipt of TH services in the TRICARE program as the Secretary considers appropriate.

The present report supplements the interim response the DoD submitted on May 22, 2017, regarding the requirement in section 718 for submission of an initial report describing the full range of TH services to be available in the direct care and purchased care components of the MHS within 18 months of the enactment of the NDAA for FY 2017, as well as any copayments and cost shares associated with those services. Section 718 requires that the initial report include a plan to develop standardized payment methods to reimburse those health care providers administering care to covered beneficiaries through TH services in the purchased care component of the TRICARE program. The NDAA for FY 2017 requires a final report to follow not later than three years after the date on which the Secretary begins incorporating the use of telehealth services.

INTRODUCTION TO MHS TH SERVICES (CURRENT AND PLANNED)

One of the most innovative lessons learned over the past 14 years of conflict, has been the benefit of TH in expanding the reach of military medicine. The MHS is a recognized leader in TH, with services spanning worldwide and including all echelons of care (e.g., point of injury on the battlefield to garrison medical treatment facility care). All of the MHS's past successes and future plans in TH revolve around one core concept – connecting Service members and MHS beneficiaries to health care globally, with the goal of increasing readiness, access, quality, and patient safety. The use of TH will allow the best of the MHS to be brought to the patient wherever they are – deployed or in garrison.

Due to TH's potential to support readiness, reduce network health care costs and improve patient experience, the MHS is continually seeking opportunities to expand its use. This report outlines the TH activities the MHS is currently utilizing, or plans to implement within the next 18 months in its continuing efforts to bring tomorrow's health care to the nation's heroes today. The intent of the MHS TH plan is to expand support across all echelons of care and within all phases of military operations. As the MHS builds capability in operational settings, it will also expand capabilities for Service members, their families, and other beneficiaries in the garrison environment.

The goal for MHS TH is a globally integrated garrison and deployed TH system. This includes programs to implement lessons learned from the civilian sector, offer TH to the Warfighter across all echelons of care, and develop innovative, ground-breaking programs that maximize the use of TH modalities across military health care. Investing in both technological and human capital ensures mission success and places the MHS in an excellent position to maximize readiness support and the value of care provided to beneficiaries.

Direct Care

Historically, each MHS Component has provided TH services designed to serve its unique operational requirements. However, to transform the future of health care, the MHS recognizes the necessity of developing common goals and platforms across all Components in order to address the broad aims of the entire enterprise. This includes the facilitation of TH services within the direct care component of the MHS and the purchased care component.

Within the MHS, the direct care component is comprised of Military Treatment Facilities (MTFs), which are DoD-operated. These MTFs are currently operated by the individual Military Services under the direction of the Surgeons General, and by the DHA under the direction of the DHA National Capital Region Director, and include hospitals, outpatient clinics, and pharmacies. The direct care system currently encompasses 55 hospitals and more than 373 clinics, serving more than 9.4 million Active Duty Service members, military retirees, and their families.

Purchased Care

The purchased care component of TRICARE is comprised of a private sector network of civilian health care providers, hospitals, outpatient clinics, pharmacies, and suppliers that supplement the direct care component and its capabilities. TRICARE operates through contracts that are administered on a regional basis. There are three regional contractors managing purchased care operations and medical services through civilian providers within the United States. However, under the new contract that will go into effect on January 1, 2018, this care will transition to two regional contractors. In addition, an overseas contractor manages the private sector care for beneficiaries who are currently located outside of the country.

TELEHEALTH SERVICES IN THE DIRECT CARE COMPONENT OF THE MHS

TH has the potential to improve the value of care provided in the direct care system. For example, TH improves readiness by providing access to care at duty locations and in the deployed environment, extending to the point of injury. TH will support provider proficiency and clinical currency by allowing MHS providers, especially in specialty care, to treat patients with a greater range of conditions. TH has the potential to improve the health of patients with certain chronic conditions by supplying relevant health feedback to patients and providers through the use of health monitoring and enhanced communications, enabling healthy behaviors to prevent development of illness or to reduce the consequences of having an illness. By helping patients more effectively prevent and manage illness, costly health care interventions such as visits or admissions can be avoided through the use of TH. TH also has the potential to improve health outcomes by enhancing the capability of primary care providers through consultation and education, as well as extending access to specialty services for patients in remote locations. Finally, TH has the potential to lower health care costs by cross-leveling care capacity, which reduces the need to refer patients to the private sector or travel to receive care from specialists.

TH services are currently in use across all DoD Components and numerous medical disciplines. Types of services include synchronous virtual provider-to-patient encounters, as well as synchronous and asynchronous teleconsultations between providers. Multiple modalities are used, such as desktop video-conference (VTC), secure messaging, mobile applications, TH carts, and portable TH equipment. TH services also include robust use of store and forward diagnostic digital imaging, particularly in the area of teleradiology.

TH services are constantly improving and expanding due to advances in technology, shared best practices between the Components, and lessons learned from civilian industry leaders. Multiple programs enable the utilization of TH services to span across the Services and the DHA with the

goals of improving readiness, population health, and health outcomes, while lowering health care costs.

Telehealth Services for Assessment, Diagnosis and Treatment/Intervention

TH services for assessment, diagnosis, and treatment/intervention typically employ the use of synchronous VTC, TH carts asynchronous teleconsultation platforms, and the telephone. The section below describes the TH services to be available in the MHS for this purpose. Currently, available services described herein are expected to continue unless otherwise noted. However, it should be noted that variations exist in the extent to which these services may be utilized across the individual Components and MTFs.

Primary Care:

TH services increase access to and extend capabilities within the primary care setting by equipping providers with the tools necessary to connect with patients and specialty care providers separated by geography and time. Currently, Patient Centered Medical Homes (PCMHs) utilize the telephone to conduct virtual visits between primary care providers and established patients to address new or ongoing medical issues and to coordinate care; over 20 percent of all PCMH visits are conducted virtually using the telephone. Health educators can also disseminate pertinent knowledge to direct care patients specific to their disease or illness using VTC equipment, webcam-based applications, and/or telephone calls. To further enhance telehealth capabilities in primary care, the MHS is undertaking two broad TH initiatives that should significantly expand the reach of the primary care provider: (a) virtual visits to the patient's location and (b) asynchronous teleconsultations via a single enterprise-wide portal.

- **Virtual Visits to the Patient's Location:** In February 2016, the Assistant Secretary of Defense for Health Affairs issued a memorandum authorizing TH to the patient's home or other authorized location as an originating site for TH services. TH services to a patient's location will involve the utilization of two-way interactive audio and video to connect a health provider and a patient in his/her home or other appropriate location for the delivery of primary care services. This could include remote care delivery via mobile applications, tablet computers, VTC, and other modalities. For example, a patient could schedule a virtual visit with his/her own Primary Care Manager (PCM) via a Health Insurance Portability and Accountability Act (HIPAA)-compliant, secure clinical VTC on their mobile device. While this service is currently offered in only a few pilot locations, the MHS is planning the implementation of an enterprise-wide virtual patient visit platform that can be utilized by providers throughout the direct care component.
- **Asynchronous Teleconsultations:** Primary care providers can also benefit greatly from the ability to consult with specialty care providers on complex cases. All Components currently participate in asynchronous teleconsultation portals that allow primary care and other providers to enter requests for consultation into a system, which then routes their request to the next available specialist for an expert opinion or diagnostic support. Some examples of this include: Pacific Asynchronous TH (PATH) and Health Experts online Portal (HELP), an Army – Navy partnership; the Army Knowledge Online E-mail Teleconsultation program for Deployed Providers (with Quad Component participation);

and teledermatology programs across the enterprise. However, most of the current systems are not connected and are limited in the number of providers who can utilize them. Thus, the MHS is currently working to develop a single, enterprise-wide teleconsultation portal that would make this capability available to all providers throughout the direct care component, in both garrison and operational environments, on a 24/7 basis every day of the year. For example, a primary care provider requiring assistance on a Special Operations mission could receive expert advice from the next available specialist in the world, including infectious disease, pulmonology, or other required specialties.

Other TH programs which are available within the primary care setting, but are limited in scope, distribution, or utilization include:

- Teleretinopathy screenings for diagnosed diabetic patients.
- Low vision rehabilitation to address patients with macular degeneration and/or glaucoma through routine primary care appointments.

Urgent Care: The Nurse Advice Line (NAL) is available 24 hours per day, every day of the year, and offers professional health advice from a team of Registered Nurses to assist callers in making informed decisions regarding when and where to seek health care. The NAL will be expanded globally in FY 2018 and will offer virtual visits to the patient's location through the PCM On-Call capability. Virtual primary care visits to the patient's location will provide a mechanism to capture the six percent of enrollee primary care visits delivered in the purchased care network. Finally, the MHS has piloted the use of TH carts in a MTF Emergency Departments to triage beneficiaries who presented with low acuity, primary care urgent needs.

Behavioral Health:

Telebehavioral health (TBH) visits currently represent the largest proportion of TH encounters within the MHS. TBH visits are being conducted across the direct care Components, both in garrison and operational environments, using clinical VTC equipment, webcam-based applications, and/or telephone calls allowing for synchronous provider-to-patient encounters. These encounters are typically delivered from provider hubs to various patient "spoke" sites. TBH encompasses a wide range of services, including individual psychotherapy, telepsychiatry, medication management and group therapy, as well as pediatric behavioral health services and child psychiatry. The MHS will continue to offer TBH Services within the direct care component and will explore opportunities to further expand these capabilities, such as using virtual visits to the patient's location.

Specialty Care:

TH within specialty care has the greatest potential to reduce network health care costs and improve readiness by increasing the number and acuity of cases treated remotely by direct care specialty providers. Currently, over 85 percent of ambulatory network health care costs are for specialty care. In addition to improving access to specialty care, virtual visits will reduce travel time for both provider and patient. Specialty care services via TH are available, but currently vary in scope, distribution, and utilization. Specialty TH services that are currently in the MHS,

or are expected to be available within the timeframe specified within section 718 of the NDAA for FY 2017, include synchronous virtual encounters and asynchronous consultations between providers and patients in Table 1.

Table 1. Synchronous and Asynchronous* Telehealth Services by Specialty

Specialty Area**	Synchronous	Asynchronous*
Alcohol/Drug Abuse	X	
Allergy	X	X
Anesthesiology	X	X
Audiology	X	
Behavioral Health	X	X
Cardiac Electrophysiology		X
Cardiology (Adult, Pediatric)	X	X
Critical Care Medicine (Adult, Pediatric)	X	X
Dermatology	X	X
Endocrinology (Adult, Pediatric)	X	X
ENT	X	X
Family Practice/Primary Care	X	X
Forensic Pathology	X	X
Gastroenterology (Adult, Pediatric)	X	X
Hematology/Oncology (Adult, Pediatric)	X	X
Infectious Diseases (Adult, Pediatric)	X	X
Internal Medicine	X	X
Interventional Cardiology		X
Neonatology – Perinatology	X	X
Nephrology (Adult, Pediatric)		X
Neurology (Adult, Pediatric)	X	X
Nutrition	X	X
Ob/Gyn	X	X
Occupational Therapy	X	
Ophthalmology	X	X
Pediatrics	X	
Pediatric Developmental - Behavioral		X
Pharmacy	X	
Physical Medicine - Rehab/Spinal Cord Injury Med	X	X
Physical Therapy	X	
Podiatry	X	X
Primary Care	X	X
Psychiatry (Adult, Pediatric)	X	X
Pulmonary Diseases (Adult, Pediatric)	X	X
Radiology/Radiation Oncology	X	X

Rheumatology	X	X
Speech Therapy	X	
Surgery (General, Hand, Orthopedic, Pediatric, Neurological, Thoracic, Plastic, Vascular)	X	X
Urology	X	X

*Asynchronous services represent consultations between providers, not provider-to-patient services.

**Health education services, as a component of listed specialty care area, could be provided either synchronously or asynchronously as appropriate.

- **Telehealth Carts:** The greatest utility for TH carts is expected in specialty care. Several Components have deployed or are currently in the process of deploying TH carts and associated peripheral devices (such as digital stethoscopes, camera illumination systems, digital otoscopes, digital blood pressure monitors, etc.) at a number of primary care clinics. These carts and devices enable the transmission of synchronous audio, video or other electronic data from a primary care clinic to a provider (primary or specialty care) at another site in order to facilitate the assessment, diagnosis, and treatment of that patient. For example, a patient could be seen by a nurse practitioner at a remote location, and the electronic peripheral devices would transmit their vital signs along with clinical VTC in real time to the distant treating provider. The provider would have the ability to hear the patient’s heartbeat, read an Electrocardiogram, evaluate ear, nose, or throat complaints, and view a wound or an ultrasound from thousands of miles away. Portable TH systems are also being piloted in deployed settings, thereby allowing medical professionals to “train as they fight,” using many of the same peripherals downrange as they do in garrison. The MHS expects to expand the use of TH to improve access to specialty care and reduce network purchased care costs.

Other:

Beyond the traditional services, there is a range of additional pertinent TH concepts that are being pursued within the MHS that will impact diagnosis and treatment and intervention services:

- **Virtual Medical Center (MEDCEN):** The Virtual MEDCEN will serve as the tactical arm and organizational structure by which providers deliver TH services using new tools, both in garrison and deployed settings, across all roles of care. The Virtual MEDCEN will include clinicians and staff that specialize in delivering health care remotely to patients wherever the patients are in the world. There will be one Virtual MEDCEN (Brooke Army Medical Center) in the MHS by June 2018, with additional sites under consideration. The goal is to offer provider reach-back capability via TH 24/7, anywhere in the world.
- **Operational TH:** Current pilots, and recent theater-based implementations, offering TBH from deployed providers to deployed patients have shown themselves to be highly successful and valued by the Warfighter. For this reason, other specialties and modalities

are being piloted throughout the deployed and operational settings. These services have the capability of maintaining the fighting force while reducing exposure/risk associated with patient and provider movement in theater. The ultimate vision is direct patient care/support from providers in garrison to patients at all roles of care during all phases of a military operation for all types of medical or psychological threats.

- Joint Capabilities Integration and Development System (JCIDS): The MHS is pursuing a requirements generation process with the Joint Staff Surgeon through the JCIDS process for all of TH in deployed environments. This would apply the JCIDS process to TH Support to Operational Forces, across all Components, which will provide structure and enforcement mechanisms for Joint capability development.

Telehealth Services for Consultation and Supervision

TH services for consultation and supervision typically employ the use of synchronous VTC and asynchronous teleconsultation platforms to connect providers and allow for the exchange of information. The section below describes the TH services to be available in the MHS for this purpose. Currently available services described herein are expected to continue unless otherwise noted. While the MHS is moving toward the use of standardized platforms and processes for these services, it should be noted that variations may exist in the extent to which these services are utilized across the individual Components and MTFs.

Primary Care:

Teleconsultation between primary and specialty care providers is available synchronously through the use of VTC or TH carts, or asynchronously through the use of teleconsultation portals such as PATH/HELP. These are collaboration and communication platforms that allow for dispersed patients and their providers with limited or no access to specialty care to obtain expert consultation and/or recommendations from specialists predominately at larger DoD facilities through asynchronous encounters.

Additionally, Project ECHO[®] (Extension for Community Healthcare Outcomes) is a telementoring model for training primary care providers to treat common and complex problems through didactic and case-based training. This model utilizes multipoint VTC to simultaneously connect multiple primary care providers with a team of specialty care providers, allowing specialists to disseminate knowledge and provide consultation to a large group of providers at the same time and to develop communities of providers who can also provide mutual support. This will assist primary care providers to practice at the top of their capabilities, which may result in a reduced need for specialty referrals. Currently, the MHS uses this model to provide training in chronic pain management, complicated diabetes management, addictions, and acupuncture. Other specialty areas will be evaluated for potential use of the Project ECHO Model[™].

Behavioral Health Care:

Synchronous teleconsultations and supervision is an option for behavioral health providers who have VTC capabilities.

Specialty Care:

Telementoring using the Project ECHO Model™ has been offered within multiple specialty fields. These fields include dermatology, sports medicine, neurology, pain management, podiatry, endocrinology and complicated diabetes management, chronic pain, addictions, and extremity trauma and amputation care.

Additionally, teleconsultation portals such as PATH/HELP, Garrison Theater Teleconsultations Program, and teledermatology allow for dispersed providers to obtain expert consultation or recommendations from experts on behalf of their patients; this capability can be utilized for over 70 specialties.

Secure messaging is increasingly being used for communication between primary and specialty care providers and the extended care team through the MHS Secure Messaging Service. Continued expansion of colleague-to-colleague messaging is currently underway, with full implementation in specialty care expected in FY 2018.

Other:

The MHS provides asynchronous TH capability that leverages radiologists and other diagnostic specialists in different locations to interpret digital images and films from patients in another location. Radiologists and specialists can review Computer Tomography scans, Magnetic Resonance Imaging scans, ultrasounds, x-rays, telecardiology and telepathology results, and tele-endoscopy video remotely.

The Telepharmacy Remote Dispensing and Verification System is used in many of the MTFs. Pharmacists remotely review outpatient prescriptions and confirm medications prior to dispensing it to patients. The local technician fills the prescription and then notifies the pharmacist. Additionally, video feeds allow visual inspection of medications and enable the patient to consult with the pharmacist.

Telehealth Services for Health Assessments

TH services including synchronous platforms, asynchronous platforms, and mobile applications, are also used to facilitate the completion of standardized health assessments. The assessments may be based on either clinical interviews between providers and patients or the completion of standardized assessment measures. The section below describes the TH services to be available for this purpose. Currently available services described herein are expected to continue unless otherwise noted. While the MHS is moving toward the use of standardized platforms and processes for these services, it should be noted that variations may exist in the extent to which these services are utilized across the individual Components and MTFs.

Primary Care:

The MHS is utilizing TH capabilities to provide readiness and deployment-related health assessments for Active Duty Service members. Specifically through TH, the MHS is able to administer portions of these assessments that are not available at the Service members' duty stations. Clinics can administer Periodic Health Assessments, Pre-Deployment Health Assessments, and Post-Deployment Health Reassessments telephonically or, if available, via

VTC and can update Service members' documentation in the appropriate medical readiness tracking systems.

Behavioral Health:

TH is leveraged for a variety of behavioral health consultations for readiness related assessments in the MHS to include pre- and post-deployment health and mental health assessments, Temporary Duty Retirement List exams, Medical Evaluation Board Narrative Summaries, and Administrative Separation packets.

Specialty Care:

The MHS utilizes teleconsultations to provide consults for Fitness for Duty evaluations for recruits who require reevaluation during their basic training. TH services are also available in the performance of Traumatic Brain Injury (TBI) screening and the completion of the Inpatient Leader Rounding Survey.

Telehealth Services to Monitor Health Outcomes for Chronic Conditions

TH services for monitoring health outcomes use technology to collect, track, and transmit remote health data from a patient in one location to a health care provider or team in a different location. Patients are provided monitoring devices that collect biometric data (e.g., blood pressure, glucose level). This data is then securely transmitted to care providers for clinical review. The section below describes the TH services to be available for this purpose. Currently available programs described herein are expected to continue unless otherwise noted. While the MHS is moving toward the use of standardized platforms and processes for these services, it should be noted that variations may exist in the extent to which these services are utilized across the individual Components and MTFs.

Primary Care:

The MHS is planning to pilot Remote Health Monitoring (RHM) for the management of chronically ill patients with specific conditions where medical evidence has demonstrated improved health outcomes. With RHM, patients will be able to utilize monitoring devices to collect biometric data that will be transmitted to an assigned Nurse Case Manager who will assess health status and care plan effectiveness. This will enable military medicine to monitor health and coordinate care for wounded warriors, family members, and retirees in remote locations. The goals for RHM for specific conditions include increased patient engagement, increased stability of chronic conditions, and reduced readmissions. The MHS will commence two RHM pilots at the beginning of FY 2018.

Urgent Care:

Not applicable.

Behavioral Health:

Not applicable.

Specialty Care:

Programs are in place and also in development to help patients self-manage and improve their chronic conditions through education. Virtual sessions with health educators or members of the health care team educate beneficiaries in areas such as obesity, cholesterol management, diabetes, and health management. The virtual platform enables engaging sessions through the delivery of a presentation and real-time communication among participants.

Other:

The TRICARE Online (TOL) Patient Portal DoD Blue Button provides convenient access to personal health data retrieved from current electronic health records (EHRs) in order to self-monitor outpatient medications, outpatient problem lists, outpatient encounters, laboratory results, radiology results, and vital signs.

Secure Messaging

The TOL Patient Portal Secure Messaging uses advanced technology to improve the patient experience, enhance access and facilitate care coordination within the direct care system. TOL Secure Messaging allows for patient-to-provider, provider-to-patient, and provider-to-provider communications in a secure manner. This includes providing patients with a secure means of sending questions to their health care team, requesting appointments, renewing medication, requesting test results, and accessing a library of health information that empowers patients to better understand and take ownership of their health. Enrollees may now use TOL Secure Messaging as a smart phone application as well. TOL Secure Messaging allows for enhanced provider to patient communications including sending preventative care messages to all patients, or to select groups of direct care enrollees with certain chronic diseases (hypertension, diabetes.) It also allows communication directly to all registered enrollees to quickly provide patient education on emerging public health threats (e.g., Zika virus.) In addition, TOL Secure Messaging services allow for colleague-to-colleague (provider-to-provider) care communication between primary and specialty care providers as well as the extended care team, such as dermatology and endocrinology services.

Secure messaging WebVisit provides a way for patients to initiate a virtual visit (asynchronous) with their provider. Standardized templates covering a large number of potential symptoms or conditions are available via an alphabetized menu. In addition, text fields are provided which enable the patient to enter specific information regarding symptoms, history, current medications and any other material relevant to the issue. The provider then receives notification of the WebVisit and is able to gain significant insight into the patient's condition prior to responding via WebVisit or scheduling a face-to-face appointment. Initial reports indicate that this is an effective way to efficiently utilize appointments, thereby maximizing access, reducing the length of an office visit or reducing extensive phone conversations.

The TOL Patient Portal also offers patient to provider and provider to patient communication through secure messaging or text messaging reminders and early appointment notifications. There is also a link on the TOL Patient Portal for contacting the NAL. If a beneficiary cannot find an appointment, beneficiaries can contact the military hospital or clinic directly or use secure messaging to send a request for appointment to their health care provider team.

As the new MHS EHR is deployed, it will offer a Secure Message feature with similar functionality as the TOL Patient Portal Secure Messaging.

Appointment Scheduling

The TOL Patient Portal Online Appointing enables direct care enrollees to make or cancel MTF appointments, set prescription reminders, refill prescriptions, and download historical personal health information through the DoD Blue Button. Beneficiaries can also view future and past appointments, set up text or e-mail appointment reminders, and set up earlier appointment notifications. Beneficiaries can receive up to three e-mail or text message reminders about scheduled appointments. The NAL is also fully integrated with the direct care system's primary care clinics for scheduling of MTF appointments if the RN determines the caller needs to be seen within 24 hours. MTF enrolled beneficiaries can also request an appointment through secure messaging for both primary and specialty care providers.

The TOL Patient Portal has been redesigned to mimic the new MHS EHR, so MTF enrollees can become familiar with the look and feel prior to full transition. TOL Patient Portal enhancements are being implemented and include a streamlined appointing module, wellness reminders, links to health information websites and a mobile application for smart phones.

As the new MHS EHR is deployed, it will offer a patient portal with similar functionality as the TOL. MHS beneficiaries enrolled to MTFs with MHS GENESIS will be able to book appointments online, see new encounter notes, test results and active prescriptions, and request renewals of prescriptions ordered in MHS GENESIS.

Mobile Applications (Apps)

The MHS has several mobile apps for use by patients, providers, and family members. In addition to the mobile application elements of the programs described above, several apps are available to improve the health and quality of life for MHS beneficiaries.

The TOL Patient Portal will be mobile accessible for online scheduling and will include prescription refills and the DoD Blue Button accessibility.

The Health and Readiness Medical Surveys (HERMES) system is a web-based and relational database management system that provides an electronic platform to support the compilation and gathering of medical surveys. HERMES will allow for provider assigned assessments to be delivered to a patient's mobile device via a text or e-mail message that includes a one-time use token that allows the patient to complete assessments available on mobile devices or home computer systems. The HERMES administrative portal will allow for providers to assign assessments to patients, view current status (completed/not completed) of assessments, view patient responses, and monitor patient progress over time.

The MHS has developed numerous award-winning, publicly available mobile apps that promote behavioral health for all Service members, Veterans, and their families and care teams. Beneficiaries can use these apps anonymously or in conjunction with a health care provider. Beneficiaries and other users have downloaded the apps over 3 million times. These apps are available for download on both Android and iOS mobile phones.

Self-care apps are for symptom prevention or reduction, and include:

- Breathe 2 Relax teaches diaphragmatic breathing to help reduce the effects of stress and anxiety.
- Feel Electric! helps young children identify and express their feelings as they deal with the unique challenges of military life.
- Life Armor provides information and self-management tools for 17 psychological health issues common to the military community.
- Navy Leader's Guide for Managing Sailors in Distress provides information on a range of topics including substance abuse, sexual assault, death of a shipmate, and other relevant issues.
- Positive Activity Jackpot uses a therapeutic technique called pleasant event scheduling to motivate beneficiaries to engage in social activities and reduce isolation.
- Mood Tracker helps beneficiaries monitor emotional health and mood states across time.
- Tactical Breather teaches diaphragmatic breathing using a simple technique initially developed for intense combat situations.

Apps for patient use with a provider include:

- Dream EZ helps beneficiaries learn to change their nightmares into less disturbing dreams to get a better night's sleep.
- Virtual Hope Box helps beneficiaries create a cache of items (hope box) to help cope with stress and regulate emotions.

Apps for provider use only include:

- Mild TBI (mTBI) Pocket Guide is a comprehensive quick-reference guide on assessing, treating and managing common symptoms of patients with mTBI.
- Provider Resilience helps behavior health providers monitor and prevent burnout.

The MHS is continually developing new mobile apps for targeted clinical domains (e.g., pregnancy, pain management) as well as broader areas of interest (e.g., patient placement). As an example of the latter, many mobile apps have been launched that are accessible from both iPhones and Android phones for Service members and their families. These apps provide users with access to MTF locations, leadership information, DoD hotlines, Secure messaging, and links to social media and other health resources.

Additional Information on Devices and IMIT enterprise platforms

The DHA Video Network Center (VNC) provides video and audio support for more than 30 modalities and programs, including TBH and telepsychiatry, and enables health care providers to learn, share, and conduct virtual training with efforts such as Project ECHO. The VNC's video and audio enterprise architecture is Service agnostic and supports MHS TH providers in all theaters. The VNC video network is linked with multiple organizations, such as the Department of Veterans Affairs (VA), to provide direct connection between video users on either the VA or the DHA VNC networks and personnel not residing on a medical network.

MHS providers use standard DoD approved video endpoint software and devices, such as desktop Internet Protocol video capability and fully integrated conference rooms. The VNC has designed its infrastructure in order for customers to use video for direct (point-to-point) calls, or scheduled clinical calls. All of these video connections are transported across an unclassified network, but are encrypted to meet HIPAA/Protected Health Information handling requirements.

The VNC will continue to offer its standard point-to-point and multipoint video conference calling capabilities from DoD approved video endpoints and its audio conferencing capability. The VNC will also maintain interconnectivity with other groups and organizations, such as the VA and academic institutions. By June 2018, the current mobile video capability will be replaced with a technology that will extend the current capabilities and will support the use by DoD customers on approved desktops, laptops, and tablets. The new capabilities will also include:

- Virtual meeting rooms which will provide users with ad hoc or dedicated capability for video bridge conferences.
- Virtual visit function which allows customers to provide a web link permitting encrypted connectivity through the participants own device.
- A robust collaboration tool capability.
- Interoperability with other platforms.

The VNC will continue to work with peer organizations, customer stakeholders, and DHA counterparts to incorporate new technologies to support MHS TH requirements.

TELEHEALTH SERVICES IN THE PURCHASED CARE COMPONENT OF THE MHS

TH services are available within the purchased care component through TRICARE contractors based on the geographical region of the beneficiary. Under the current TRICARE contract, these services are provided by Humana Government Business (HGB) in the South Region, Health Net Federal Services, LLC (HNFS) in the North Region, and United Healthcare Military & Veterans in the West Region. On July 21, 2016, the new TRICARE regional contracts were awarded to HGB (East Region) and HNFS (West Region). Delivery of health care services under the new contracts will begin on January 1, 2018.

Current TRICARE policy (TRICARE Policy Manual 6010.57M, Chapter 7, Section 22.1) allows for TRICARE authorized providers to use interactive audio/video technology to provide clinical consultation, office visits, individual psychotherapy, psychiatric diagnostic interview examination, and pharmacologic management when appropriate and medically necessary. These services, however, are currently restricted to a limited number of corresponding Current Procedure Terminology or Healthcare Common Procedure Coding System codes delineated in the policy. These services also include the requirement to use an authorized originating site. This is where an otherwise authorized TRICARE provider normally offers services, such as the office of an authorized individual or institutional provider. TRICARE policy is currently being revised to greatly expand the availability of TH services in order to meet the requirement of

section 718 of the NDAA for FY 2017, directing that services furnished by TH be covered to the same extent as the service would be covered if provided at the location of the beneficiary.

Changes are also being made to the TRICARE policy, which is consistent with what is being provided in the direct care system. Specifically, in order to improve access and simplify processes for beneficiaries to get the care they need when necessary, the MHS wants to promote additional options for accessing care. As a result, changes are being made in order to utilize telemedicine to its full benefit by no longer limiting authorized telemedicine originating sites (e.g., where the beneficiary is located) to those locations where an otherwise authorized TRICARE provider normally offers professional medical or psychological services, such as the office of a TRICARE authorized individual professional provider (e.g., physician's office), or a TRICARE authorized institutional provider. Beneficiaries will be able to access telemedicine services from the comfort of their home as well as other locations.

The following sections describe the TH services currently available within the purchased care component of the MHS, as well as those services expected to be available during the timeframe specified in section 718 of the NDAA for FY 2017. Expansion of TH services is expected to follow the TRICARE Policy Manual revisions. A wide range of synchronous and asynchronous TH services are expected to be available across a spectrum of clinical settings and specialties. It should be noted, however, that variations will likely exist in the extent to which these services may be utilized across the regions.

Telehealth Services for Assessment, Diagnosis and Treatment/Intervention

Primary Care:

Primary care TH services will include those that utilize synchronous virtual video visits to connect established patients and providers for assessment, diagnosis, and treatment for a wide range of health-related concerns, including those related to health maintenance, medication management, follow-up for stable chronic conditions, health promotion, and palliative care. TH services will be implemented across the full spectrum of primary care settings, including family medicine, internal medicine, general practice, and pediatrics.

Urgent Care:

TH services are expected to be available for the assessment, diagnosis, and treatment for urgent conditions such as, but not limited to, allergies, sprains, arthritis pain, asthma, bronchitis, nausea and vomiting, diarrhea, infections, insect bites, pharyngitis, conjunctivitis, rash/skin inflammation, respiratory infections, sinus problems, urinary tract infections, cold and flu.

Behavioral Health:

TBH services currently represent the largest proportion of TH encounters within the purchased care component of the MHS and further expansion is anticipated with the pending revision to the TRICARE policy. TBH care to a patient's location provides added convenience and confidentiality, which is a value to many beneficiaries who may be reluctant to visit an office location for services. TBH services will include synchronous patient to provider video visits for evaluation and treatment services delivered by providers in traditional behavioral health settings

as well as those integrated within the primary care clinic. These services will also include psychotherapy for adults, adolescents, and children using both individual and group modalities. Common problems that can be treated using TH will include depression and other mood disorders, anxiety disorders, addiction treatment, and addiction treatment aftercare. Telepsychiatry and medication management will also be available through TH.

Specialty Care:

Specialty care services will be available via TH and are expected to include, but not be limited to, synchronous provider to patient virtual visits and asynchronous consultations in the following specialties: Allergy & Immunology, Anesthesiology, Cardiovascular Disease, Critical Care Medicine, Dermatology, Emergency Medicine, Endocrinology, Gastroenterology, General Surgery, Genetic Counseling, Hematology/Oncology, Infectious Disease, Neonatology, Nephrology, Neurology, Obstetrics and Gynecology (OB/GYN), Pathology, Physical Therapy, Pre-operative and Post-operative Surgical Care, Pulmonary Disease, Speech Pathology/Speech Therapy, and Urology. These will include services for both adult and pediatric patients.

Telehealth Services for Consultation and Supervision

Primary Care:

TH services for consultation and supervision for primary care within the purchased care component of the MHS have yet to be determined.

Urgent Care:

Most urgent care encounters are self-limited/acute in nature and require minimal or no consultations or referrals. Consultations via traditional means will be available if needed.

Behavioral Health:

Expansion of telepsychiatry services is expected in the future and will allow psychiatry treatment and medication recommendations to be sent from the remote psychiatry provider back to the primary care clinics where the care of the patient will be delivered.

Specialty Care:

Specialty care consultation services by TH will be available in the following specialty areas: Neurology, Pulmonary Disease/Critical Care, Geriatrics, OB/GYN, Pain Management, Cardiology, Urology, Allergy/Immunology, Endocrinology, Gastroenterology, Hematology/Oncology, Infectious Disease, Nephrology, Ophthalmology, Otolaryngology, Radiology, Rheumatology, Dermatology, Orthopedic surgery.

Telehealth Services for Health Assessments

Primary Care:

Health assessment capabilities for primary care within the purchased care component of the MHS have yet to be determined.

Urgent Care:

Health assessment capabilities for urgent care within the purchased care component of the MHS have yet to be determined.

Behavioral Health:

Capabilities are being pursued and are anticipated to be available. This will allow for the administration of mental health assessments tools in the form of online questionnaires (e.g., Patient Health Questionnaire-9 [(PHQ-9)], Generalized Anxiety Disorder 7-item scale [GAD-7], or other standardized assessment tools.)

Telehealth Services to Monitor Health Outcomes for Chronic Conditions

Monitoring health outcomes through TH services within behavioral health care is expected to be available. This would assist with monitoring health outcomes for chronic disease, particularly comorbidities of mental health conditions like depression, anxiety, and addiction with chronic physical health conditions. This solution would provide a technology and provider platform that includes local behavioral health providers, live psychiatry consultations for primary care providers, data driven insights through adaptive learning and predictive algorithms, and health education for patients.

There are currently plans in place for future asynchronous services in RHM using mobile cardiac outpatient telemetry. After being evaluated by a cardiology provider and receiving a referral for the service, the beneficiary will receive the home monitoring system along with detailed instructions on how to attach the device. The data can then be transmitted through secure lines to a monitoring service, where the findings are reviewed and documented. The findings are transmitted to the ordering cardiology provider, and an alert is sent directly to the beneficiaries if the data suggests that immediate medical attention is needed.

In-home sleep monitoring is also expected to be available. Monitoring equipment will be sent directly to the beneficiary's home with instructions on how to use the equipment along with instructions on how to return the equipment to the issuing provider. When the device is returned, the data is interpreted and the findings are sent back to the ordering physician for follow-up treatment.

Secure Messaging

Secure messaging capabilities will be available through either patient portals or SMS text message options (expected to be accessible through smart phone applications) that will enable patients to communicate with the health care providers and receive disease-specific education, health-related information, or provider information relevant to their referrals and authorizations.

Secure messaging is also anticipated to be available for telepsychiatry services. For telepsychiatry, the technology platform will include options to securely send documents or e-mail-like messages directly between the originating site primary care provider or patient and the distant site psychiatry provider.

Mobile Applications (Apps)

Mobile applications are expected to be available that will allow beneficiaries to access information to support active and healthy lifestyles. Beneficiaries will have the ability to access TRICARE information and functions on their mobile device on demand such as provider directories, eligibility information, frequently asked questions, enrollment, billing, and links to information on authorizations, referrals, and claims status.

It is also expected that Urgent Care services will provide a network of physicians that can be reached 24/7 by video conference through computer or mobile application. This would allow patients to use the mobile application to connect with a provider who can diagnose and treat non-emergent conditions.

Additionally, it is expected that some virtual patient visits, including telepsychiatry services, will be accessible via smartphones, tablets, and other similar mobile devices, or at kiosk-type configurations at an originating site.

Copayments and Cost-Shares

Under TRICARE, a cost-share or copayment is required for telehealth services. A cost-share or copayment is collected for both the destination site and the originating site. The cost-share or copayment is applied in the same manner as if the services were provided without telecommunications system. For example, Prime Active Duty family members have no copayment for the services; Prime Retirees and family members using a network provider would have a \$12.00 copayment for outpatient care, and other beneficiary category groups would be subject to the 15 percent, 20 percent, or 25 percent cost-share rates for outpatient services, depending on whether the provider was a network provider, or not. In order to incentivize the use of telehealth services, DHA is in the process of eliminating beneficiary cost-sharing related to the originating site. Additionally, where appropriate, DHA will also reduce or eliminate copayments or cost-shares for covered beneficiaries in connection with the receipt of high value services, including services provided via telemedicine, in accordance with the multiple authorities provided in the NDAA for FY 2017.

Reimbursement Plan

TRICARE currently reimburses telemedicine using a standardized methodology that reimburses TH providers at the same rate and in the same manner as when services are provided in person, negating the need to further develop such methodology. Our research shows that, while some jurisdictions have enacted laws that govern private payer telehealth reimbursement to require insurers to cover telehealth services the same as if those services are delivered in person (as long as it meets the same standard of care), they do not state that private payers must reimburse telehealth services at the same rate as in-person services. This has resulted in some insurers reimbursing telehealth services at reduced rates. In order to prevent the reimbursement of TH at a reduced rate, a few states have begun to introduce payment parity legislation which requires private payers to cover telehealth services “at the same rate” as when the service is provided in-person. The MHS is ahead of the curve in this regard as it already reimburses the "in person" rates, with no reduction. This standardized reimbursement methodology/rate incentivizes the provision of telehealth over in-person services when coupled with other potential cost savings

and efficiencies realized by providers who deliver TH services, such as the ability to attract new patients, reduced overhead costs (e.g., facility and personnel costs), decreased no-shows, increased scheduling flexibility, and reduced travel costs in some cases. The MHS does not believe changes to reimbursement rates are needed to further incentivize TH services at this time, but will continue to monitor the implementation of TH services in the purchased care component and will consider future adjustments based on the needs of MHS beneficiaries.

CONCLUSION

The Secretary is committed to further enhancements and standardization of TH services within both the direct and purchased care components of the MHS to enable patients to better manage their health, facilitate providers to deliver better care, reduce health care costs and support mission readiness and operational medical capabilities. TH services within the MHS will continue to improve and expand due to additional advancement in technology and sustained cooperation between the Components, providing a superior health care delivery system to this Nation's Service members, families, and retirees.

REFERENCES

Assistant Secretary of Defense for Health Affairs Memorandum “Provision of Telemedicine at a Patient’s Location,” February 3, 2016

DoD Manual 6025.13 “Medical Quality Assurance (MQA) and Clinical Quality Management in the Military Health System (MHS),” October 29, 2013

Section 713 of the NDAA for FY 2012 “Expansion of State Licensure Exception for Certain Health Care Professionals”

Section 718 of the NDAA for FY 2017 “Enhancement of Use of Telehealth Services in MHS”

TRICARE Policy Manual 6010.57-M, Chapter 7, Section 22.1 “Telemental Health (TMH)/Telemedicine,” February 1, 2008

ACRONYMS

DHA – Defense Health Agency

DoD – Department of Defense

ECHO – Extension for Community Healthcare Outcomes

EHR – electronic health record

FY – Fiscal Year

HELP – Health Experts online Portal

HERMES – Health and Readiness Medical Surveys

HGB – Humana Government Business

HIPAA – Health Insurance Portability and Accountability Act

HNFS – Health Net Federal Services, LLC

JCIDS – Joint Capabilities Integration and Development System

MEDCEN – Medical Center

MHS – Military Health System

mTBI – Mild Traumatic Brain Injury

MTF – Military Treatment Facility

NAL – Nurse Advice Line

NDAA – National Defense Authorization Act

OB/GYN – Obstetrics and Gynecology

PATH – Pacific Asynchronous Telehealth

PCM – Primary Care Manager

PCMH – Patient Centered Medical Home

RHM – Remote Health Monitoring

TBH– Telebehavioral Health

TBI – Traumatic Brain Injury

TH – Telehealth

TOL – TRICARE Online

VA – Department of Veterans Affairs

VNC – Video Network Center

VTC – Video-teleconference