Virtual Health for Military Families

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Prior to his military service, LTC Cornfeld served as a U.S. Peace Corps Volunteer in Sangwali, Namibia; Executive Secretary to the Vice President of MetLife Inc, New York, NY; and an Americorps Volunteer with Habitat for Humanity in Raleigh, North Carolina.

LTC Cornfeld’s military awards include Army Meritorious Service Medals, Army Commendation Medals, Army Superior Unit Award, National Defense Service Medal, Global War on Terrorism Service Medal, Army Service Ribbon, and the Parachutist Badge. He was selected as the USU School of Medicine Outstanding Student in Pediatrics and as a member of Alpha Omega Alpha, the national medical honor society. LTC Cornfeld has been selected as a plenary, podium, and session speaker at multiple national and international symposiums.
LTC Cornfeld and Mr. Cain have no relevant financial or non-financial relationships to disclose relating to the content of this activity.

The views expressed in this presentation are those of the authors and do not necessarily reflect the official policy or position of the Department of Defense, nor the U.S. Government.

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Learning Objectives

At the conclusion of this knowledge-based activity, participants will be able to:

1. Identify the ways the MHS unifies Virtual Health Capabilities through Implementation of Functional Capability #39.
2. Review the internal and external demand signals driving implementation of Virtual Health.
3. Articulate VH use cases in both Adult and Pediatric Primary and Specialty Care.
Polling Questions – Let’s get to know you

Please tell us your role in the MHS?
A. Privileged Provider Type I/II
B. Clinic Care Team: Nurse, Medic, Licensed practical nurse (LPN), Practice manager, Clinic Support
C. Hospital of Clinic Management
D. Regional or Head Quarters (HQ) Administration
Polling Questions – Let’s get to know you

Please indicate your Virtual Health Experience?

A. Telephone
B. Email direct to patient and/or Short Message Service (SMS) / Relay Health
C. Video visits with patients
D. All of the Above
Polling Questions – Let’s get to know you

What are the most important digital tools the MHS needs in order to support Families and Children’s health?

A. Video Visits to the Patients Location (Home, Office, or Remote and Operational)
B. Video Visits between Medical Specialists and Outlying Primary Care Clinics
C. Asynchronous Consultation between providers
D. Improved and secure SMS between patients and providers
E. All of the Above
‘Virtual Health’ is the use of telecommunications and information technologies to provide health assessment, treatment, diagnosis, intervention, consultation, supervision, education, and information across distances.

In the MHS, the terms “telehealth”, “telemedicine”, and “virtual medicine” are equivalent to “virtual health” and are used interchangeably.
### Unified VH Terms researched by Connected Health (CH) Clearing House

#### MHS TECHNOLOGY GLOSSARY

**DHA CONNECTED HEALTH**

**JANUARY 2019**

**Introduction**

House Report 115-219, pages 287–289, to accompany H.R. 2319, the Department of Defense Appropriations Bill, 2018 directs the Assistant Secretary of Defense (Health Affairs) to provide a strategy for delivering tele-behavioral health services to service members. Part of this strategy is a phased stakeholder communication campaign that will provide clinicians and beneficiaries with standardized terms for discussing tele-behavioral health. Toward this end, the Defense Health Agency (DHA) Connected Health Clearinghouse received a request from DHA Communications to conduct research and analysis to inform the eventual development of a Military Health System (MHS) Technology Glossary.

The MHS provides health care for service members and their families in over 600 medical clinics across 50 military hospitals worldwide. For a health care organization of this size, shared language is especially important. However, various terms, such as “virtual health,” “virtual medicine,” “telehealth,” and “telemedicine,” are being used interchangeably. The lack of standardized nomenclature results in significant confusion for patients, providers, researchers and policy makers, and impacts implementation, utilization, and deeper comprehension within the health care field.

The aim of this report is to provide recommendations for terminology describing the use of technology to deliver or support health care. Recommendations are based upon a global analysis of documents and data compiled through strategic searches.

#### Methods

Technology Categories:

- This report’s findings were organized into one umbrella term (the general use of technology in health care), and three technology-specific categories: internet/mobile, and the use of technology to remote locations (see Figure 1). Based on a comprehensive analysis, the paper concludes with a recommended term and definition for each category.

#### Figure 1. Diagram of Technology Categories:

<table>
<thead>
<tr>
<th>Technology Category</th>
<th>Recommended Term</th>
<th>Recommended Term Definition</th>
<th>Frequency of Term Definition from Literature Search</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. An umbrella term to generally describe the use and integration of technology into health care.</td>
<td>Digital Health</td>
<td>“The use of digital, mobile and wireless technologies to support the achievement of health objectives. Digital health describes the general use of information and communication technologies (ICT) for health and is inclusive of both mHealth and eHealth.” (WHO, 2016)</td>
<td>5 references found in 11 relevant articles.</td>
</tr>
<tr>
<td>B. The use of internet or computers to support or deliver health care.</td>
<td>Electronic Health (eHealth)</td>
<td>“eHealth is an emerging field in the intersection of medical informatics, public health and business, referring to health services and information delivered or enhanced through the Internet and related technologies.” (Eysenbach, 2001)</td>
<td>3 references found in 19 relevant articles.</td>
</tr>
<tr>
<td>C. The use of mobile devices and their associated features, or the use of mobile apps to support or deliver health care.</td>
<td>Mobile Health (mHealth)</td>
<td>“Medical and public health practice supported by mobile devices, such as mobile phones, patient monitoring devices, personal digital assistants (PDAs), and other wireless devices. mHealth involves the use and capitalization on a mobile phone’s core utility of voice and short messaging service (SMS) as well as more complex functionalities and applications including general packet radio service (GPRS), third and fourth generation mobile telecommunications (3G and 4G systems), global positioning system (GPS), and Bluetooth technology.” (WHO, 2014)</td>
<td>13 references found in 22 relevant articles.</td>
</tr>
<tr>
<td>D. The use of technology to support or deliver health care to remote locations or over long distances, as well as facilitate provider education and consultation.</td>
<td>Telehealth</td>
<td>“Telehealth is defined as the use of electronic information and telecommunication technologies to support and promote long-distance clinical health care, patient and professional health-related education, public health and health administration. Technologies include video conferencing, the internet, store-and-forward imaging, streaming media, and terrestrial and wireless communications.” (HRSA, ND)</td>
<td>3 references found in 20 relevant articles.</td>
</tr>
</tbody>
</table>
VISION: Unified and Ready...
MISSION: As a Combat Support Agency, the Defense Health Agency leads the MHS integration of readiness and health to deliver the Quadruple Aim: improved readiness, better health, better care, and lower cost.
MHS VH Mission and Vision

**Vision Statement**

Connecting Service Members, their families, and other beneficiaries to optimal health services, wherever and whenever they are needed.

**Mission Statement**

The Military Health System (MHS) Virtual Health capability uses an empirically driven and Market-based approach to bring health readiness services, assessment, care, health education, and health self-management to beneficiaries throughout the enterprise. This Virtual Health capability is backed by a robust global Virtual Medical Center that allows leveraging of care between Markets, between the Direct and Purchased Care Networks, between Operational and Non-Operational settings, and between the DoD and other partner agencies.
"Medically Ready Force...Ready Medical Force"
Important VH Policy

Brief History of VH To the Patients Location

- DHA-PM 6025.13 (Replaces DOD PM 6025.13)
- Removes link between provider, patient and MTF.
- Includes MHS Virtual Medical Center (VMC) language and allows for privileging by proxy (PBP) – ‘One to Many’
- A Personal Services Contractor or even Active Duty Service Member (ADSM) could practice from a community location (Home)

- DHA-PI 6025.xx (Replaces DHA-IPM 18-001)
- Includes more details about how to handle patient care via telephone and VH appointing
- Replacement does not include coding guidance. Will refer to MHS Medical Coding Doc.
- Future single source for coding ‘The MHS Medical Coding Guidelines’

Section 718, 2017 NDAA Incorporation of Telehealth

Directs Secretary of Defense to incorporate broad based Telehealth services in the MHS, including mobile health applications, secure messaging: (A) to improve access to primary care, urgent care, behavioral health care, and specialty care; (B) to perform health assessments; (C) to provide diagnoses, interventions, and supervision; (D) to monitor individual health outcomes of covered beneficiaries with chronic diseases or conditions; (E) to improve communication between health care providers and patients; and (F) to reduce health care costs for covered beneficiaries and the Department of Defense. Goes on to explain methods SM, Synchronous Video, RHM and Tricare reimbursement. Also requires assessment of the satisfaction of both covered beneficiaries and providers.

“Medically Ready Force...Ready Medical Force”
Enterprise VH Capabilities in Market Based System

“Medically Ready Force...Ready Medical Force”

Courtesy of Connected Health
The Military Health System (MHS) VH Program. Managed by the DHA and collaboratively executed by the Uniformed Services and Markets. DHA is implementing a multi-year phased transition of military treatment facilities (MTFs) to the authority, direction, and control (ADC) of the Defense Health Agency (DHA).

1. **MHS VH Program Management Office.** Responsible for the total lifecycle management of the program including determining the solution(s); its procurement; sustainment

2. **MHS VH Clinical Integration Office (VH CLIO).** Responsible for integrating telehealth as a standard practice across the MHS in the various domains of care through its guidance in a manner consistent with established practice and quality standards of the Joint Commission (JC) and other regulatory requirements. Reports to Deputy Assistant Direct for Medical Affairs (MA) and will develop VH functional requirements, competency management framework, education and training plans and priorities, metrics, analysis, and need & gap validation.

3. **MHS Virtual Medical Center (VMC).** The clinical execution organization for VH care delivery across the Enterprise. The VMC responsibilities include credentialing and privileging by proxy (PBP), need and gap identification and, in a future state, quality and safety and accreditation.

4. **Health Information Operations (IO), Health Informatics, Health Care Operations, Service VH Leads**

**Is the VMC a Market? An MTF?**

A: *Not a Market, sort of an MTF. Acts as a functional overlay to the Markets*
The MHS VMC

Virtual Medical Center (VMC) Front Office (San Antonio)
(Provides direction and administrative support for all VMC elements)

HQ Office

Proposed Configuration

VMC Hubs

Primary Regional Hubs
(Regionalized VH support of Markets and Operational Care)
- CONUS Hub: San Antonio
- Indo-Pacific Hub: San Diego (main), Hawaii (satellite), Japan/Korea (satellite)
- European Hub: Landstuhl

Support for Market-Based VH Care
- Direct Report (DR) Markets
- Small Markets and Stand Alone Facilities (SSO)
- Defense Health Region – Europe
- Defense Health Region – Indo-Pacific
- TRICARE (Purchased Care)

Support for Operational VH Care
- NORTHCOM
- SOUTHCOM
- INDO PACOM
- Embassies (Marines)
- Coast Guard

VMC Clinical Support Services
- Enterprise VH Privileging
- Market VH Planning Assistance

Specialty Hubs
(Delivery of select specialty services via an enterprise hub & spoke system)
- Critical Care
- Behavioral Health
- Specialty Medical Care
- Genetic Counseling
- Store-and-Forward Consultation
- Medical Readiness Evaluation and Care

Support for Operational VH Care
- EUCOM
- AFRICOM
- CENTCOM
- SOCOM
- Reserve Components

“Medically Ready Force...Ready Medical Force”

Courtesy of Connected Health
MHS VH Efforts linked to Quad Aim

“Medically Ready Force...Ready Medical Force”
Current MHS VH Community Efforts

- Strategic Planning
- Providing Interim VH Capabilities for Markets (Wave 1)
- VH PMO Acquiring Interim Solution – IPT Set Up to Field
- Working with HI to plan for VH integration with MHS Genesis
- Manpower Studies to staff VH positions in VMC and Markets
- Working to Integrate the VMC and its constituent parts into DHA
Civil War—Telegraph to transmit casualty lists and request supplies

Telegraph

Radio

Telephone

Television

Internet
Innovation Driven by Need and Capability

Civil War—Telegraph to transmit casualty lists and request supplies

Telegraph, Radio, Telephone, Television, Internet

Adapting the capability to the requirement

Tele-practice, Tele-consultation, Tele-education, Tele-research

“Medically Ready Force...Ready Medical Force”
Virtual Medical Center OCONUS HUB Footprint

102 EUCOM Locations
55 DHA MTF
17 Army Operational MTF
1 Marine MTF
4 AF Operational MTF
3 NATO / Joint MTF
4 Department of State
18 VIPRR Sites

Legend
- DHA MTF
- Army Operational MTF
- Navy Operational MTF
- AF Operational MTF
- NATO / Joint MTF
- Dept of State MTF
- VIPRR Readiness Site

Operational Sites: 79  Garrison Facilities: 56  Total Sites: 135

18 CENTCOM Locations
1 DHA MTF
4 Army Operational MTF
5 AF Operational MTF
1 NATO / Joint MTF
8 VIPRR Sites

14 AFRICOM Locations
1 Navy Operational MTF
5 AF Operational MTF
2 Department of State
6 VIPRR Sites

Courtesy of Connected Health
A Day In The OCONUS Virtual Medical Center - European Hub

Virtual Health Europe’s Capabilities:

• Integrated Asynchronous and Synchronous video Operations → Link HELP with Video visits
• Dynamic scheduling for patients, providers, and Nurse Presenters → Bring the MEDCEN to the point of need
• Personalized training for Providers and Presenters → Integrate VH into daily use

Virtual Health Results

• 35 VH visits to 79 operational and 56 fixed sites across three Combatant Commands (CCMD)
• 10 Operational Virtual Health Visits are performed
• 300+ providers across 42 Specialties performing Virtual Health
• 1/20 surgeries at Landstuhl Regional Medical Center (LRMC) started with a VH visit
How does the Sailor in the Oval appear?
A. Upset
B. Disconcerted
C. Content
D. Pleased
Quadruple Aim through Virtual Health: Access to Care and Lower Cost

Developmental Pediatrics
- Different constructs in Europe and beyond
- Expand reach first to MTFs then beyond
- Evolving care delivery
  - Determine tests required during VH SPEC
  - Perform tests during TDY mission

"Medically Ready Force...Ready Medical Force"
Quadruple Aim through Virtual Health: Access to Care and Lower Cost

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Delivery of Specialty Care = Access to care
Minimize trips to Landstuhl = Lower Cost

“Medically Ready Force...Ready Medical Force”
The Use of Telemedicine to Address Access and Physician Workforce Shortages

COMMITTEE ON PEDIATRIC WORKFORCE
“A five year old boy from Vicenza, had bilateral ear tubes placed at age one for recurrent ear infections. Through some magical healing, the tube fell into the middle ear and the ear drum healed, causing the ear tube to become stuck in the middle ear behind an intact ear drum. **Through telehealth, I was able to evaluate the ear and see the tube behind the eardrum, get a computed tomography (CT) ordered at Aviano, then set the patient up for surgery, and he's having surgery tomorrow (16 August). It saved at least two trips to LRMC for evaluation and CT scan and the family was very pleased.**”

Lt Col Brent Feldt, MC, USAF
Otolaryngologist
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Lt Col Brent Feldt, MC, USAF
Otolaryngologist

- Parent stays at work = Readiness
- Minimize trips to LRMC = Lower Cost
- Pediatric Surgery = Surgical Readiness
Clinical Communities Speaker Series

What’s A Provider To Do???

**Current State:**
- **Modalities:** Telephone, Email
- **Providers:** Little benefit to VH
- **Patients:** Clear need & desire
- **Systems:** Poorly defined
- **Enterprise:** Muddied

**Future State:**
- **Modalities:** Telephone, Email, Video
- **Providers:** Incentivized, Enjoy
- **Patients:** Clear need...met
- **Systems:** Defined
- **Enterprise:** Clear priority

*Virtual Health Capabilities*

*Virtual Health Resistance*
Common Themes:
1. Education and Training
2. Recruitment
3. Ease of Use

Which Elements do you have?
1. Jabber vs GVS?
2. VHCCA vs Regional Health Command Europe (RHCE) scheduling?
Virtual Health Tenants
1. VH has to be a winner for all actors
   - Enterprise, Providers, Nurses, Patients
   - Schedulers
2. VH requires supportive, permissive leadership
   - “Mission Command”
3. VH has to be easy

Virtual Health Strategies
1. Start slow with quick wins
   - “Screening Visits”
   - Laboratory Results
   - Established patients
2. Add capacity as capability increases
   - Specific types of new patients
Key Takeaways

- Review MHS Definition of Virtual Health
- Illustrate current Service Led Virtual Health Activities
- Demonstrate DHA Implementation and Virtual Health
- Define key guidance advancing Virtual Health in the MHS
- Outline Family and Pediatrics VH Use Cases
References


THANK YOU!

Questions?
How to Obtain CE Credit

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1. Go to URL https://www.dhaj7-cepo.com/
2. In the search bar on the top left, copy and paste the activity name:. This will take you to the activity home page.
3. Click on the REGISTER/TAKE COURSE tab.
   a. If you have previously used the CEPO LMS, click login.
   b. If you have not previously used the CEPO LMS click register to create a new account.
4. Verify, correct, or add your profile information.
5. Follow the onscreen prompts to complete the post-activity assessments:
   a. Read the Accreditation Statement
   b. Complete the Evaluation
   c. Take the Posttest
6. After completing the posttest at 80% or above, your certificate will be available for print or download.
7. You can return to the site at any time in the future to print your certificate and transcripts at https://www.dhaj7-cepo.com/
8. If you require further support, please contact us at dha.ncr.j7.mbx.cepo-lms-support@mail.mil