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2015 Defense Health Information Technology Symposium

TeleHealth: Addressing Emerging Capability Gaps and Challenging Existing Doctrine



“Medically Ready Force...Ready Medical Force”

“A joint, integrated, premier system of health, supporting those who serve in the defense of our country.”



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Learning Objectives



- Broadly discuss emerging Army and Joint future force objectives
- Understand how future force objectives will affect healthcare delivery in support of global operations
- Determine how teleHealth can address associated capability gaps
- Determine how teleHealth implementation can affect current Service doctrine

Agenda



- Provide a brief outline of Army 2025B and Defense Strategic Guidance
- Discuss associated medical capability gaps resulting from Future Force guidance
- Discuss how teleHealth can be leveraged to address associated capability gaps
- Discuss how teleHealth technology “push” may affect current and future Service doctrine
- Questions/Discussion

Evaluations



- Please complete your evaluations

Defense Strategic Guidance/Army 2025B



- 5 JAN 2012: “Sustaining U.S. Global Leadership: Priorities for 21st Century Defense”
- Commonly referred to as Defense Strategic Guidance or DSG
- Emphasis on Middle East and Asia-Pacific
- The “shift to the Pacific” will present new challenges for the medical community not experienced in the Middle East
- Army 2025 and Beyond highlights this Asia-Pacific focus as well as operating concepts that begin to resemble concepts we see in SOCOM: smaller and more independently-operating units covering larger areas

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Medical Assumptions Based On DoD/Service Planning Guidance



- Air superiority, specifically for rotary aircraft, is NOT guaranteed
- Doctrinally-aligned evacuation assets will be challenged to cover smaller units operating more remotely
- Evacuation times may be severely affected with tremendous Joint coordination required between ground and sea-based assets
- Smaller ground elements may be required to hold trauma casualties for longer periods of time (see SOCOM lessons learned)
- Current medical training for conventional medical forces may prove insufficient leading to higher died-of-wounds rates
- Unnecessary medical evacuations will have greater effects on units due to turnaround times for RTDs
- Fighting in congested cities will be particularly challenging for medical evacuation

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How a comprehensive teleHealth set of capabilities can help



- **Telementoring:** Telementoring involves procedural guidance of one professional by another from a distance using telecommunications. Includes, but is not limited to, interactions involving audio dialogue, video telestration (video tablet and pen), video teleconferencing, remote biotelemetry and remote guidance of a camera or laparoscope. Telementoring acts as a force-multiplier for medics operating in remote areas without direct support of higher medical skillsets and has the potential for reducing unnecessary medical evacuations.
- Requires modern, network-based platforms including bi-directional mobile solutions operating across secure networks supporting both voice and video with cross-domain solutions throughout the longitudinal architecture.

How a comprehensive teleHealth set of capabilities can help



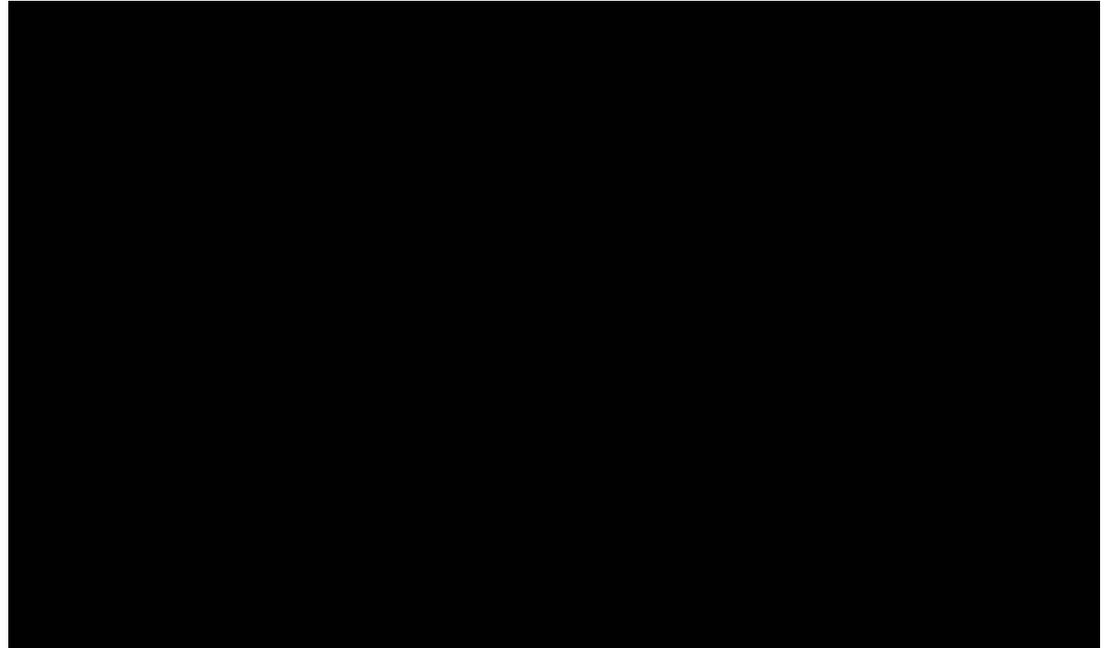
- **Telemedicine:** Provisioning health care professionals to evaluate, diagnose and treat patients in remote locations using telecommunications technology. Although both are considered components of the larger category “teleHealth,” telemedicine differs from teleconsultation in that teleconsultation is provider-provider and telemedicine is provider-patient.
- Non-trauma related routine healthcare requires extensive reliance on specialty care which in-turn requires non-emergency evacuation. Bringing applicable specialty care to the foxhole virtually can negate much of the burden on the medical evacuation system, simplify access to care, and help maintain unit performance by keeping service members with their units.

How a comprehensive teleHealth set of capabilities can help



Just-in-time training delivery

Ryder Trauma Center in Miami has been evaluating JIT training delivery to teach chest tube insertion prior to air evacuation with great success.



Comprehensive teleHealth requires new capabilities



Finger Probe
Transducer

Portable/Wearable
Ultrasound "Front end"
Processor



Wireless
Display/Monitor



Paused ("begin narrative" to start)

A: Intact • Adjunct • Cric • Intubated
B: ChestSeal • NeedleD • ChestTube
C: TQ • Hemostatic • Packed • PressureDx

Allergies:
Injury: **amputation, right hand**
Tourniquet: **11:24:04 - right | arm**
Drugs: **11:24:15 - morphine 5mg**

Name/ID:
Vitals: **11:24:20 - blood pressure: 90/60**
11:23:53 - the patient has an amputation of the right hand due to an explosion
11:24:04 - applied a tourniquet to the right arm
11:24:15 - administered 5 milligrams morphine



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How teleHealth may challenge medical doctrine



- Current doctrine includes the development of deployable organizations and platforms with the majority of required capabilities “built-in.” This is further augmented by individual capabilities and medical specialties as needed.
- This type of medical doctrine is driven largely by the limiting factor of distance.
- Remove distance from the equation, and now doctrine is challenged to answer the following question: “Must all medical care providers be physically deployed to provide quality care to operationally deployed service members?”

- teleHealth has the ability to remove distance from the equation!
- **Question:** If the Air Force can reliably prosecute an air campaign around the world from an installation in Las Vegas, why can’t the Military Health System provide some of its care in the same fashion?

Contact Information



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Questions?



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