# Not for Publication until released by the House Armed Services Committee

### **Statement of**

Rear Admiral Thomas Cullison, MC, USN

**Deputy Surgeon General of the Navy** 

Before the

Subcommittee on Military Personnel and Subcommittee on Terrorism and Unconventional Threats and Capabilities

of the

**House Armed Services Committee** 

**Subject:** 

**Department of Defense Health Information Technology** 

March 24, 2009

Not for Publication until released by the House Armed Services Committee Chairman Smith, Chairwoman Davis, Representatives Miller and Wilson, distinguished members of the committee – thank you for the opportunity to testify before you today on the Military Health System's Health Information Technology (IT) systems.

Sailors, Marines and their families deserve the best health care in the world.

Navy and Marine Corps world-wide presence requires constant global access to current patient data for appropriate clinical decisions at sea, ashore in the Middle East (e.g. Iraq, Afghanistan, etc.) and in military treatment facilities (MTFs) aboard our bases and stations. The Navy and Department of Defense (DoD) are working to improve our enterprise-wide medical and dental clinical information capability which generates, maintains, stores, and provides secure access to patient records. We are driven to improve provider satisfaction and enhance our data sharing within the DoD; the VA healthcare delivery continuum; and, in the future, private sector health care.

### **CURRENT SYSTEMS DEPLOYED AT NAVY MTFs**

Military medicine pioneered electronic patient information. The Composite HealthCare System (CHCS) provided electronic availability of ancillary services such as laboratory and radiology results, as well as scheduling and pharmacy information. The ability to electronically prescribe pharmaceuticals within DoD MTFs markedly increased patient safety using automated checks of each patient's medication record and eliminated transcription errors. This system is now dated in design and functionality. Although these capabilities were updated with solutions including Radiological Picture Archiving and Communication System (PACS), pharmacy automation systems, and numerous laboratory automated systems, complete integration remains a future goal.

Navy MTFs utilize the Theater Medical Information Program-Joint (TMIP-J) and TRANSCOM Regulating and Command & Control Evacuation System (TRAC2ES) to coordinate care for returning casualties. These systems provide clinical and demographic information from other treating facilities, including those in Iraq, Afghanistan and other operational theaters. Delays were prevented and safety was enhanced throughout our system.

# ARMED FORCES HEALTH LONGITUDINAL TECHNOLOGY APPLICATION (AHLTA)

AHLTA provides a world-wide outpatient record in all military fixed MTFs. Unlike the decentralized architecture of CHCS, AHLTA is designed around a single worldwide database, the Clinical Data Repository (CDR). Utilizing CDR data requires client software installed on thousands of personal computers to interact via unique networks across the Global Information Grid (GIG). This complex system provides greatly improved electronic health record capability over the previous CHCS capability; however, we are experiencing some performance and reliability challenges as we integrate the capability throughout the Navy Medical facilities. To enhance the current capability provided by the CHCS application, Navy Medicine is jointly fielding with MHS an interim inpatient capability. A Contract award is scheduled this month.

The current application design, functional mapping, and work flow present limitations that make it difficult for clinical staff to efficiently document patient care while treating patients. Navy Medicine's clinical champions, those most comfortable with AHLTA, have created processes and methods to help others in optimizing time spent with patients while recording information. The MHS AHLTA Program Manager

incorporated over 200 of these recommendations in the most recent version, AHLTA 3.3. Numerous hardware and software problems identified during the AHLTA 3.3 beta test at Naval Medical Center Portsmouth have mostly been overcome. Subsequent release of this version across Navy Medicine has been largely successful with steady improvement in user satisfaction.

Navy Medicine is committed to providing quality training to AHLTA users at all levels. For the last two years, our sustainment training contract places one or more trainer/consultants at each Navy MTF. These trainers/consultants provide new users initial training and current users additional over-the shoulder help to use AHLTA better and more efficiently. This effort has improved utilization and documentation quality. Trainers and MTF clinical champions work together to identify user needs to most effectively keep AHLTA users current on new features and online training resources. The sustainment training contract includes the establishment of an online training resource, <a href="https://www.navyahlta.com">www.navyahlta.com</a>, includes tools for every type of user and is updated as AHLTA is updated.

Navy Medicine piloted AHLTA enhancements such as wireless mobile tablets and voice recognition which increase flexibility to improve provider-patient interaction. This allows providers to face their patients rather than type with their backs turned. Acceptance continues to increase across Navy medicine as we provide greater capability and focus on training. The inclusion of Dragon Naturally Speaking (voice recognition software) and As-U-Type/spell check software have also increased user satisfaction.

## PERSONAL HEALTH RECORD (PHR)

Navy Medicine as part of a joint military health pilot has begun a cooperative program with both Microsoft and Google to provide PHR capability. Information from the AHLTA central data repository is now populated into a patient accessible on-line health record. This capability opens the EHR to the patient and lead to future EHR integration with commercial healthcare providers.

# COORDINATION BETWEEN NAVY MTFs AND VETERANS AFFAIRS FACILITIES

In October 2010, the Naval Health Clinic Great Lakes is joining operations with the North Chicago Veterans Administration Medical Center to establish the Captain James Lovell Federal Health Care Center. This unprecedented effort provides an opportunity to combine clinical and business processes that meets the standards for common operating environments for military and VA applications. From business operations to clinical care, the two organizations are working together to treat diverse patient populations. In this collaborative effort initiatives are underway to establish a common solution to fulfill both organizations' requirements. This will be accomplished while meeting the medical needs of the about 40,000 Navy recruits each year from our only recruit training facility. Creating each new Sailor's electronic medical record is a part of this process. Any delay in this process would severely impact our ability to sustain manpower replenishment across the Navy.

## **JTF CAPMED**

Joint Task Force National Capital Region, Medical (JTF CAPMED)
establishment, highlighted by merging National Naval Medical Center and Walter Reed
Army Medical Center into the Walter Reed National Military Medical Center in
Bethesda, presents an opportunity for all to examine service-specific mission
requirements as well as common business practices which can be best served in future
electronic medical record versions. The end result should be standardized, cost effective
and efficient IT solutions connecting high quality medical services in the National Capital
Area with military medicine throughout the world.

### **FUTURE DIRECTION OF AHLTA**

Navy Medicine seeks to improve provider satisfaction and strengthen data sharing throughout DoD, VA and our Tricare partners. We support MHS efforts to improve military health IT infrastructure and ensure optimal performance. Together with the MHS, we are developing near-term improvements to respond to provider requests for improved usability, stability, and reliability. In addition, planned mid-term advancements will improve provider satisfaction, and modernize our architecture and infrastructure. These enhancements create capability for the continual improvement of electronic health record capabilities and movement away from outdated components which require expensive sustainment efforts.

We are supporting the MHS' effort of incorporating a three-phased plan for reshaping of the electronic health system. This approach utilizes a standards-based approach for meeting current and future interoperability requirements while fulfilling

unique defense security requirements. Near-term improvements answer urgent provider requests for improved usability, stability and reliability. Mid-term and long-range advancements sustain provider satisfaction and modernize our architecture and infrastructure. Modernization efforts make it possible to integrate quickly into AHLTA new, user-friendly capabilities and reduce our reliance on outdated components that are difficult and expensive to maintain.

Our long-term goals must include solutions that acknowledge each Service's mission requirements. Navy Medicine must be able to maintain and share medical information between our operational forces and fixed medical facilities. Unlike other Services, our units routinely visit many different ports and medical facilities during each routine deployment. This requires bidirectional capability for electronic medical records aboard ship and in Marine field units which includes the ability to operate in a standalone mode to provide application operation in a no-communication environment. We should focus on establishing common architecture requirements that can meet our electronic medical record efforts ashore, as well as aboard a ship or far forward with Marines

Data-sharing with our Tricare network partners remains a difficult challenge.

Navy MTFs developed various local information exchanges; however, none of these solutions appears to be a systemic solution. We will continue to work with the MHS, the Nationwide Health Information Network and civilian industry on this.

Navy Medicine supports progress toward an electronic inpatient record. Recent contracting activity in this direction is encouraging.

Sustainment costs may be reduced by decreasing the number and complexity of support systems required. We are investigating incorporating a thin client solution to increase capability for remote access to AHLTA by moving the application off of the end user device to a regional server. This will not only provide greater access to our clinical staff, but also the Reservists, National Guard, Marine Corps and Fleet (in port) medical personnel. MHS remote access architecture will provide the long term solution planned for FY10.

Thank you again for the opportunity to testify before you today on the state of health IT and Navy Medicine. I am eager to see how the recent improvements provided by the MHS will impact our ability to provide healthcare services. I am convinced that improvements in electronic medical records will have a positive impact on the healthcare provided our Sailors, Marines and their family members.