

Armed Forces Health Longitudinal Technology Application (AHLTA)

Executive Summary

- The Army Test and Evaluation Command (ATEC) and the Army Medical Department Board (AMEDDBD) conducted the operational test of Armed Forces Health Longitudinal Technology Application (AHLTA) Block 2 Dental release at six dental clinics located in California, Oklahoma, Texas, and Washington from May to July in 2007. The Air Force 92nd Information Operations Squadron conducted information assurance penetration testing concurrent with the operational testing. The OT&E results showed that the Dental release is operationally effective, operationally suitable, and operationally survivable, but with limitations.
- One operational effectiveness issue precludes immediate full fielding of the Block 2 Dental release. The Dental Readiness Classification functionality does not always work properly. The program manager will correct this deficiency prior to a full fielding decision review scheduled for January 2008.
- Although the Program Management Office drafted a new Acquisition Strategy, milestones and decision review dates have not been set for Block 3.

System

- AHLTA, formerly Composite Health Care System II, is a Major Automated Information System that is used in military medical treatment facilities worldwide to support patient care. AHLTA is a key enabler to the DoD's Force Health Protection Initiative.
- AHLTA links multiple commercial off-the-shelf medical products and introduces new techniques and procedures for recording patient encounters. It standardizes medical and dental information and makes it immediately available to military health care professionals worldwide.
- The system manages and records patient encounters, enables calculation of third-party billing, and performs or integrates various clinical operations that include order entry, order monitoring, and results retrieval.
- AHLTA consists of three major functional blocks:
 - Block 1 provides outpatient encounter documentation, order entry, and medical information retrieval.
 - Block 2 integrates medical, dental, and optometry information.



- Block 3 will replace legacy functions such as pharmacy, laboratory, and radiology functionality. It will also provide inpatient charting and documentation.
- In addition to the three major functional blocks, AHLTA also provides a Local Cache capability and a Clinical Data Repository/Health Data Repository (CHDR) interface. The Local Cache capability enables health care providers to continue electronic patient encounter documentation during wide area network outages. The CHDR interface is a joint venture that provides two-way data exchange between DoD's Clinical Data Repository and Veterans Affairs' Health Data Repository. AHLTA also interfaces with the Theater Medical Information Program to provide patient record continuum between wartime and peacetime.

Mission

- The military health care providers equipped with AHLTA can create and maintain uniform, comprehensive, legible, secure, electronic health records for all beneficiaries of the Military Health System.
- A comprehensive, integrated electronic medical and dental record is critical to satisfy readiness requirements and provide quality health care services.

Activity

- ATEC and AMEDDBD conducted the operational test of AHLTA Block 2 Dental release from May to July in 2007 at six test sites. The test sites included Budge and Rhoades Dental Clinics, Fort Sam Houston, Texas; 23rd

Dental Company, Marine Corps Air Ground Combat Center, Twentynine Palms, California; Whidbey Island Naval Air Station Dental Clinic, Oak Harbor, Washington; 72nd Dental Squadron, Tinker AFB, Oklahoma; and 82nd Dental

Squadron, Sheppard AFB, Texas. The OT&E was conducted in accordance with the DOT&E-approved Test and Evaluation Master Plan and Event Design Plan.

- In conjunction with the OT&E, the Air Force's 92nd Information Operations Squadron conducted information assurance penetration testing at selected dental clinics, mid-tier server sites, and the Clinical Data Repository operated and maintained by the Defense Information Systems Agency in Montgomery, Alabama.
- Although the Program Management Office drafted a new Acquisition Strategy, milestones and decision review dates have not been set for Block 3.

Assessment

- The OT&E results showed that AHLTA Dental release is operationally effective, operationally suitable, and operationally survivable, but with limitations.
- One operational effectiveness deficiency precludes immediate full fielding of the Block 2 Dental release. The Dental Readiness Classification functionality does not always work correctly. The program manager will correct this deficiency prior to a full fielding decision review scheduled for January 2008.
- There are two holdover problems from previous OT&E: productivity and user friendliness. These concerns are now substantially mitigated and do not preclude mission accomplishment. Nevertheless, the design of the human system integration has made health care providers' interaction with the electronic health records more cumbersome and slower than it is with paper records. In addition, system response times are sometimes slow.
- The Block 2 Dental release OT&E did not include the testing of an alternate computing facility for ensuring continuity

of operations because this capability has not been fully implemented. Given the importance of maintaining continuity of operations for such a critical system, the implementation of an alternate computing facility should be given increased priority and required resources.

- The re-baselining of Block 3, with critical milestone and decision dates still undetermined, has effectively put test planning for Block 3 on hold. The draft Acquisition Strategy needs to be completed and approved so that work on the Block 3 Test and Evaluation Master Plan can resume.

Recommendations

- Status of Previous Recommendations. The program manager has taken action on all of the FY06 DOT&E recommendations.
- FY07 Recommendations.
 1. The program manager should continue correcting the problems with the Dental Readiness Classification functionality and ATEC should verify the corrective action.
 2. The program manager should continue to improve user friendliness and system response times of both the medical and the dental modules in order to increase productivity.
 3. The program manager needs to examine the information assurance penetration test findings, determine the risk for each vulnerability, and mitigate those risks that are not acceptable.
 4. The Assistant Secretary of Defense (Health Affairs) should continue to provide sufficient resources to complete the implementation of an AHLTA alternate computing facility. In addition, this alternate computing facility should undergo OT&E.