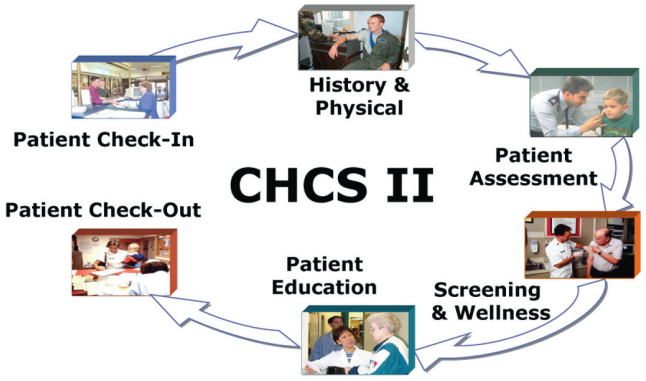
Composite Health Care System II (CHCS II)

Executive Summary
- Phase I of Block 2 operational testing was completed in July 2004. Phase II was completed in November 2004.
- The optometry module is operationally effective, suitable, and survivable.
- The dental module is not operationally effective or suitable, but is survivable.

System
- The Composite Health Care System II (CHCS II) is a Major Automated Information System that is used in military medical treatment facilities worldwide to support patient care.
- CHCS II 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.
- CHCS II consists of three blocks:
  - Block 1 provides medical information.
  - Block 2 integrates medical, dental, and optometry information.
  - Block 3 will replace legacy ancillary functions such as pharmacy, laboratory, and radiology; and extends capabilities from the ambulatory to the in-patient environment.

Mission
- The military health care providers equipped with CHCS II can create and maintain a uniform, comprehensive, legible, secure, electronic health record 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.
- The system manages and records patient encounters, calculates third party billing, and performs or integrates various clinical operations that include order entry, order monitoring, and results retrieval.
- In addition to supporting medical and dental care, CHCS II is a key enabler to Force health protection and population health improvement.



Activity
- CHCS II employs an incremental development approach. Block 1 is being fielded.
- The Block 2 operational test began with Phase I in July 2004 and concluded with Phase II (which targeted specific areas of concern) in November 2004. Evaluation was completed in February 2005.
- Testing was conducted on systems with typical users at seven test sites in Virginia and Texas.
- Both optometry and dental capabilities were tested in Phase I. Only the dental module required additional testing in Phase II.
- Operational testing has been done in accordance with the DOT&E-approved Test and Evaluation Master Plan and test plans.

Assessment

Operational testing was adequate. The optometry module is operationally effective, suitable, and survivable. The optometry module is ready for worldwide deployment.

The dental module, however, is not operationally effective or suitable (although it is survivable), despite the program office's substantial efforts to improve the capability between Phase I and Phase II testing. Observed deficiencies include:
- Lowered productivity (patient throughput)
- Inadequate mission support (procedures and products)
- Poor usability of the software

The dental module slowed operations to an unacceptable pace and required dentists to follow a frustrating and sometimes illogical set of procedures. Despite these deficiencies, the system offers benefits overall, including a legible, accurate, and electronically transferable health record.

Recommendations

1. The dental module is not ready for deployment until correction and verification of software deficiencies.
2. The correction to the deficiencies should focus on the following:
   - Using more logical procedures that mirror the processes military dentists are trained to follow
   - Providing a patient record that can be easily read and understood in all dental treatment facilities
3. Conduct follow-on test and evaluation on the dental module after the deficiencies have been corrected and verified during developmental testing.