

COMPOSITE HEALTH CARE SYSTEM II (CHCS II)



The Composite Health Care System II (CHCS II) is a tri-Service, medical management automated information system (AIS) that will be used in all military treatment facilities (MTFs) worldwide—fixed, deployed, and aboard ships. The core capability is a uniform, comprehensive, legible, secure Computer-based Patient Record (CPR) for every beneficiary. CHCS II integrates the existing CHCS and the functions of over 40 different DoD and Service-unique systems in various stages of development, while also providing new capabilities. It integrates medical and dental information, and is a key enabler for Force Health Protection and Population Health Improvement, two cornerstones of military medicine. CHCS II also addresses the need for readily accessible health care information on deployed Service members.

BACKGROUND INFORMATION

CHCS II will be implemented in multiple releases with increasing functionality. The system was awarded Milestone I in May 1998, and in 1999, ATEC, the independent OTA, conducted a Customer Test (a type of OA) on a CHCS II risk reduction phase system that was installed in three clinics in Hawaii. The results indicated that the prototype system was not operationally effective or suitable, but the assessment provided valuable information used to design the next iteration of the software, which incorporated substantial operational and technical architectural changes. In August 2000, ATEC conducted an abbreviated OA in Hawaii on an early version of CHCS II Release 1. Most of the users agreed that it was superior to the version tested the year before, but response times, reliability, and ease of use still did not meet user requirements. The PM used user feedback to continue to improve the software. In September 2000, the Joint Requirements Oversight Council approved a comprehensive CHCS II ORD.

TEST & EVALUATION ACTIVITY

Release 1, which targets ambulatory care, has successfully completed laboratory DT&E. It is now installed in selected clinics at four test sites: Portsmouth Naval Medical Center, VA; Langley AFB, VA; Fort Eustis, VA; and Seymour-Johnson AFB, NC. Data collection for Government Installation Acceptance Test will begin in January 2002, when CHCS II will be evaluated in an operational environment, without artificial constraints. Formal IOT&E is scheduled to occur at these same test sites in June 2002.

TEST & EVALUATION ASSESSMENT

CHCS II is very complex, and much coordination is required between the Services, the separate product managers of the many migration and legacy systems, and the test community. The PM has very effectively utilized Integrated Product Teams (IPTs), but funding fluctuations and architectural changes have presented challenges in planning for IOT&E of the integrated system. DOT&E actively participates in these IPTs to provide guidance.

Since it will be DoD's premier health care system, CHCS II will have a tremendous operational impact on the fighting force. The CPR will be the first (military or civilian) cradle-to-grave automated health care record: one that can revolutionize the effectiveness of the Military Health System (MHS) by providing instantaneous patient information to health care providers worldwide. An associated "smart card" will enable the warfighters to carry some of this information with them, thus enhancing combat effectiveness by expediting health care at all levels.

CHCS II is on the leading edge of technology and must link multiple commercial-off-the-shelf products in a way that is not being done or is even feasible in the civilian sector. It requires health care providers to become increasingly "computer literate" and also introduces new techniques and procedures, such as the use of templates to record patient encounters in an effort to standardize the CPR.

DOT&E will continue to actively support the IPT process and directly assist in test planning so that IOT&E can take place as soon as practicable. DOT&E's independent assessment will provide recommendations that should aid the DoD in fielding the best possible clinical system to support the MHS.