

Theater Medical Information Program (TMIP)

The Theater Medical Information Program (TMIP) is a Tri-Service system that integrates information from existing medical information systems and provides it to deployed medical forces. TMIP supports all medical functional areas, including command and control, medical logistics, blood management, patient regulation and evacuation, medical threat/intelligence, health care delivery, manpower and training, medical capability assessment, and sustainment analysis. The Program Manager (PM) is developing TMIP in blocks of increasing functionality and integration. The Services fund their own infrastructure (networks and communications) and computer hardware to host the TMIP software in the theater environment.

TMIP Block 1 integrates information from existing medical systems such as the Composite Health Care System (CHCS), CHCS II, Defense Blood Standard System, and Defense Medical Logistics Standard Support. Future blocks will eventually integrate other medical applications that have been developed for use during deployment, such as the Transportation Command Regulating and the Command and Control Evacuation System. The Joint Requirements Oversight Council approved a Capstone Requirements Document in January 1999 and a TMIP Block 1 Operational Requirements Document (ORD) in October 2000. JROC revalidated the ORD in August 2001.

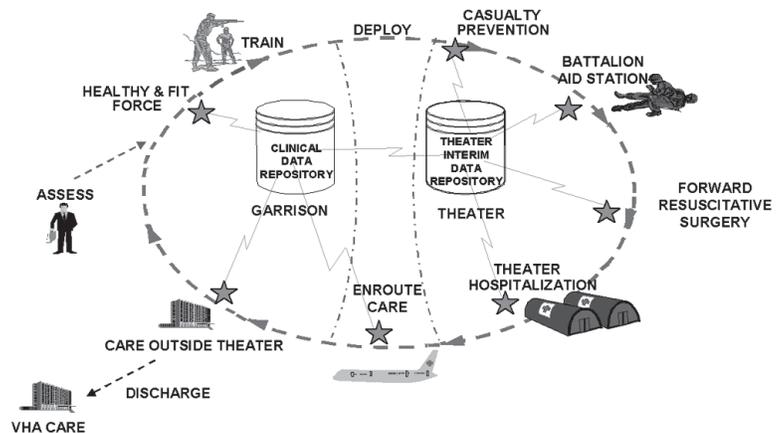
In March 2001, the Army Test and Evaluation Command (ATEC) conducted a limited user test on a prototype version of TMIP Block 1 at Fort Sam Houston, Texas, using the Army's TMIP hardware and infrastructure. ATEC determined that all of the features and capabilities that were available for testing were operationally effective, but these included only about half of those planned for the initial operational capability. TMIP successfully demonstrated limited administrative processing of patients, integration of CHCS, management of supply and equipment assemblages, and preparation of several Joint Task Force (JTF) reports. ATEC assessed the TMIP Block 1 prototype not suitable due to deficiencies in continuity of operations, security, and information assurance. There were also shortfalls in training and documentation. The PM continued to develop the software and in January 2003, the system achieved Block 1 Milestone C and Block 2 Milestone B.

TEST & EVALUATION ACTIVITY

In April 2001, DOT&E approved a Capstone Test and Evaluation Master Plan and an annex that addressed TMIP Block 1. DOT&E approved updated versions of these documents in October 2002.

All four Services conducted developmental testing in February and March 2003. ATEC performed continuous evaluation during the event, which included typical users at Diego Garcia; Brooks Air Force Base, Texas; and Norfolk, Virginia. Army TMIP equipment and users were not available, having been deployed to Kuwait. However, technicians at an Army laboratory site in Largo, Maryland, simulated Army users. The Joint Forces Command simulated a JTF headquarters at Portsmouth, Virginia. Testers and subject matter experts directed activities from a test operations center at Pacific Fleet headquarters in Pearl Harbor, Hawaii.

Testers conducted a follow-on developmental test from July 28 - August 1, 2003, from a test operations center in the Washington, D.C., area. Participants included Army users at Fort Gordon, Georgia; Air Force users at Brooks Air Force Base, Texas; Navy users



The Theater Medical Information Program is a tri-Service system that integrates information from existing medical information systems and provides it to deployed medical forces.

DOD PROGRAMS

aboard two ships of the 7th Fleet; and Marine Corps users in Okinawa. The Joint Forces Command again simulated a JTF at Portsmouth, Virginia.

TEST & EVALUATION ASSESSMENT

TMIP must integrate several existing and developmental systems into a single system that can be easily used by theater commanders and medical personnel in combat environments. Its heavy dependence on the successful operation of the other systems presents additional technical challenges. The functional and operational testing of each TMIP application is supposed to occur prior to delivery to the TMIP PM for integration. This can impose a scheduling problem for TMIP since a delay in or problem with, any application can impact the delivery of that TMIP block. In the past, this and other factors resulted in schedule slippage, and there were difficulties in sharing data with the various applications. However, the system successfully completed Block 1 integration and independent software qualification testing in October 2002. In December 2002, the PM issued the joint TMIP software to the Services for training and developmental testing.

Developmental testing during 2003 showed that all of the planned TMIP Block 1 applications were working as designed and that required information from multiple sources could be received, processed, and displayed at JTF headquarters. The second round of developmental testing conducted in a simulated user environment showed that computer systems aboard Navy ships could be adapted to use TMIP and transmit medical information to a fleet headquarters and then forwarded to a JTF. Following the successful developmental testing, TMIP hardware and software were retained for real world use at a naval clinic in Diego Garcia, aboard two 7th Fleet ships, and at Pacific Fleet headquarters. Meanwhile, Army equipment with installed TMIP software remains in Kuwait, where it is available for real world use as required.

ATEC led the efforts to develop a comprehensive System Assessment Plan that focused its continuing operational evaluation during the joint developmental testing and will also guide future planning for OT&E. Independent operational testing was not practicable during FY03 due to the real world deployment of potential users during Operation Iraqi Freedom. The latest TMIP software release was available for developmental testing in November 2003. Among other things, this software release upgrades the TMIP operating system from Windows NT to Windows 2000®. While developmental testing is ongoing, planning for IOT&E continues.