Joint Operational Medicine Information Systems (JOMIS)

IOT&E events of Joint Operational Medicine Information Systems (JOMIS) managed applications are occurring as the applications become available for deployment. DOT&E will report on these test events as they occur. The Joint Interoperability Test Command (JITC) conducted an IOT&E event for the Medical Common Operating Picture (MedCOP) managed application in November 2023. DOT&E will publish a MedCOP report in 2QFY25. Operational testing of the other managed applications within the JOMIS portfolio began in January 2024, and will continue into FY25.

SYSTEM DESCRIPTION

The JOMIS program management office (PMO) provides a suite of applications – referred to as managed applications – to the warfighter to support the medical missions in theater. The JOMIS managed applications are:

- **MedCOP:** Provides a web-based interactive decision-support platform arming command surgeons and medical commanders with the ability to view, analyze, report, and share Health Service Support/Force Health Protection status in near real-time to inform current decision making and future planning.
- **Operational Medicine Care Delivery Platform (OpMed CDP):** Enables healthcare delivery and documentation of patient care at lower-level medical facilities using a commercial off-the-shelf capability.
- **Battlefield Assisted Trauma Distributed Observation Kit – Joint (BATDOK-J):** Enables healthcare delivery and documentation of patient care at the point of injury and during patient transport using a government off-the-shelf capability.
- **MHS GENESIS Theater (MHSG-T):** Enables healthcare delivery and documentation of patient care to all categories of patients at forward-deployed hospital facilities in a disconnected environment.
- **Operational Medicine Data Service (OMDS):** Serves as the data-centric infrastructure providing critical data transport and management capabilities that are key to all JOMIS operational medicine modernization activities.
- **Theater Blood Mobile (TBLD-M):** Provides the Services and blood operations community with the capability to manage and electronically document blood product donations; blood asset inventory and transfusions; and transmittable disease testing and tracking in both connected and disconnected, intermittent, and low-bandwidth operational environments. TBLD-M also provides real-time blood tracking of Walking Blood Bank candidates at both the local and aggregated level.

MISSION

Warfighters will use the managed applications acquired through the JOMIS PMO to support the five operational medicine healthcare functions: Medical Command and Control (MedC2), Medical Situational Awareness (MedSA), Medical Logistics (MedLOG), Healthcare Delivery (HCD), and Patient Movement (PM). See Table 1 below.

Table 1. Medicine Healthcare Functions Supported by JOMIS Managed Applications

	MedC2	MedSA	MedLOG	HCD	PM
MedCOP	X	X	X	X	X
OpMed CDP				X	
BATDOK-J				X	
MHSG-T			X	X	
OMDS	X	X	X	X	X
TBLD-M			X	X	

PROGRAM

MedCOP, OMDS, and TBLD-M are all software acquisition pathway programs, while OpMed CDP is a Middle Tier of Acquisition pathway program. BATDOK-J was previously developed by the Air Force Research Lab. MHSG-T is jointly developed with the Defense Healthcare Management System Modernization (DHMSM) PMO and is a Business System Category I program. DOT&E approved the JOMIS TES in September 2022. The JOMIS PMO has fielded MedCOP to most combatant commands but has not yet fielded the other five managed applications.

» MAJOR CONTRACTORS

A multitude of contracts and contractors support the JOMIS program.

TEST ADEQUACY

JITC conducted IOT&E of MedCOP at U.S. Africa Command in November 2023. The test was conducted in accordance with a DOT&E-approved test plan and observed by DOT&E. The test team observed operational users at U.S. Africa Command Headquarters and Service component sites use MedCOP in support of their operational mission. The IOT&E event was adequate to evaluate MedCOP's operational effectiveness and suitability. JITC evaluated the cyber survivability of MedCOP by conducting a cooperative vulnerability and penetration assessment in August 2023 and an adversarial assessment in July 2024. DOT&E will publish a MedCOP IOT&E report in 2QFY25.

JITC conducted the first part of a two-part operational assessment (OA) of four of the managed applications supporting the core HCD mission (OpMed CDP, BATDOK-J, MHSG-T, and OMDS) in January 2024. DOT&E observed part one of the OA, which was conducted in accordance with a DOT&E-approved test plan. Medical personnel used the HCD applications to document patient care in simulated scenarios. DOT&E will report on the outcome of the OA following the completion of part two, which is currently scheduled for 1QFY25.

PERFORMANCE

» EFFECTIVENESS, SUITABILITY, AND SURVIVABILITY

DOT&E expects to report on the operational effectiveness, suitability, and survivability of the JOMIS managed applications following each OT&E event, beginning with the MedCOP IOT&E report in 2QFY25.

RECOMMENDATIONS

For operational testing of the HCD applications in FY25, the JOMIS PMO should:

1. Continue close collaboration with JITC and DOT&E to conduct operational testing that evaluates whether each managed application is operationally effective, suitable, and cyber survivable.
2. Ensure that upcoming operational tests have sufficient users to support assessments of operational effectiveness, suitability, and cyber survivability.