

Joint Operational Medicine Information Systems (JOMIS)



In May 2025, DOT&E published a Joint Operational Medicine Information Systems (JOMIS) Medical Common Operating Picture (MedCOP) IOT&E report, based on FY24 testing. In FY25, the Joint Interoperability Test Command (JITC) conducted two operational assessments (OAs), a cyber survivability test, and a large IOT&E event that collectively tested five JOMIS-managed applications, and supporting modernized data backbone. In FY26, DOT&E will report on the JOMIS operational testing conducted in FY25.

SYSTEM DESCRIPTION

The JOMIS Program Management Office (PMO) provides a suite of 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 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 chartered 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.

PROGRAM

JOMIS uses multiple acquisition pathways for its managed applications. MedCOP, OMDS, and TBLD-M are software acquisition pathway programs, while OpMed CDP is a Middle Tier of Acquisition rapid prototyping pathway program. BATDOK-J was previously developed by the Air Force

Research Laboratory. MHSG-T is jointly developed with the Defense Healthcare Management System Modernization (DHMSM) PMO as a Business System Category I program with enduring support provided by DHMSM. DOT&E approved the JOMIS T&E Strategy in September 2022.

The JOMIS PMO has fielded the classified variant of MedCOP to most combatant commands and plans to begin fielding the other managed applications in FY26.

» MAJOR CONTRACTORS

A multitude of contracts and contractors support the JOMIS program. Portfolio integration is managed directly by the JOMIS PMO.

TEST ADEQUACY

In FY25, JITC conducted two OAs, a cyber survivability assessment, and an IOT&E of the JOMIS-managed applications

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	

related to the operational medicine healthcare functions of HCD, MedLOG, and MedSA, in accordance with the DOT&E-approved T&E Strategy.

» HCD TESTING

In FY25, JITC conducted the HCD OA and IOT&E to evaluate the HCD applications: BATDOK-J, OpMed CDP, MHSG-T, and OMDS. Together, these systems enable medical personnel to document healthcare in theater. BATDOK-J, OpMed CDP, and MHSG-T support documentation at different types of medical facilities, while OMDS transfers documentation among them and provides the means of injecting operational medicine care documentation into the MHS GENESIS longitudinal record.

JITC conducted a two-part HCD OA in January and October 2024 to inform readiness for IOT&E. In both parts of the OA, medical personnel used the HCD applications to document patient care under simulated scenarios in a laboratory environment.

JITC conducted a cyber survivability test of all JOMIS-managed applications, comprised of a cooperative vulnerability and penetration assessment (CVPA) in April 2025, a cyber tabletop exercise in April 2025, and an adversarial assessment (AA) in June 2025.

In June 2025, JITC conducted the first phase of an IOT&E to inform the initial fielding of the three HCD applications and supporting OMDS backbone. During IOT&E, medical personnel used the JOMIS-managed applications to document simulated patient care on USS *Makin Island* (LHD 8); on

USNS *Mercy* (T-AH 19); and at simulated Marine Corps medical facilities at Camp Pendleton, California in July 2025, JITC conducted the second part of IOT&E at simulated Air Force medical facilities at Fort Detrick, Maryland. DOT&E will report on the outcomes of the IOT&E and the cyber survivability testing in FY26.

JITC conducted, and DOT&E observed, the HCD OA and cyber survivability testing in accordance with a DOT&E-approved test plan. DOT&E reviewed and provided feedback on initial drafts of the HCD IOT&E test plan but did not approve the final version of the test plan and did not observe testing, due to personnel constraints following the restructuring of DOT&E during the same timeframe.

» MEDLOG TESTING

In April 2025, JITC conducted the TBLD-M OA to evaluate both TBLD-M and its interoperability with the classified variant of MedCOP, using the OMDS data backbone. The TBLD-M OA evaluated TBLD-M's ability to support a simulated blood distribution system and transfer data to MedCOP. The TBLD-M OA was conducted in accordance with the DOT&E-approved test plan, and DOT&E observed the testing. DOT&E will report on the outcome of the OA in FY26.

» MEDSA TESTING

In May 2025, DOT&E published an IOT&E report following the MedCOP IOT&E conducted in FY24. JITC conducted the IOT&E in accordance with a DOT&E-approved test plan, and DOT&E observed the test. The

test was adequate to evaluate the operational effectiveness and suitability of MedCOP. The test was not intended to assess cyber survivability.

PERFORMANCE

» EFFECTIVENESS

HCD Applications

In the HCD OA, JITC found that the JOMIS HCD applications contain deficiencies and lack features medical providers need to document care; such problems could jeopardize patient safety if the applications are used for actual care. Additionally, patient data do not consistently transfer horizontally from one application to another as patients move through the continuum of care, leaving providers with potentially incomplete information about prior medications and treatments. Care documentation is transmitted vertically to OMDS and into the full longitudinal record, requiring a connection with OMDS from all applications in order to be able to successfully access patient care at another location.

In FY26, DOT&E will publish an IOT&E report with operational effectiveness assessments of the suite of HCD applications, based on the testing conducted in FY25.

MedLOG Applications

In FY26, DOT&E will publish an OA report with an operational effectiveness assessment of TBLD-M.

MedSA Applications

At the time of testing, DOT&E determined that MedCOP was not operationally effective. While MedCOP consolidates medical information – such as unit status, medical supply availability, and treatment facility readiness – it does not accurately display data from external sources. Therefore, MedCOP does not provide accurate or complete medical situational awareness, requiring users to access other systems to obtain accurate data and complete their tasks. Multiple improvements to the product have been implemented since the November 2023 IOT&E, including additional automated data sources and rollout of the unclassified MedCOP capability. Additional details are in DOT&E's May 2025 IOT&E report. The JOMIS PMO intends to conduct follow-on testing in FY26 to validate remediations to issues identified in the previous test events.

» SUITABILITY

HCD Applications

In the HCD OA, JITC found that the JOMIS HCD applications do not meet user needs. Users identified usability and training shortfalls that could reduce the system's performance in the deployed environment. Additionally, MHSG-T is difficult for system administrators to install.

In FY26, DOT&E will publish an IOT&E report with operational suitability assessments of the suite of HCD applications, based on the testing conducted in FY25.

MedLOG Applications

In FY26, DOT&E will publish an OA report with an operational suitability assessment of TBLD-M.

MedSA Applications

MedCOP is not operationally suitable. Low user adoption limits its value. Forward units do not consistently report their data in MedCOP, so users at higher echelons do not have all the data they need for medical situational awareness. At the time of the test, forward units without SIPRNet access could not use MedCOP at all. This finding was resolved with the role out of the MedCOP-U product that feeds MedCOP-S. Additional details are in DOT&E's May 2025 IOT&E report.

» SURVIVABILITY

In FY26, DOT&E will publish a cyber survivability report on all JOMIS-managed applications, based on the CVPA and AA conducted in FY25.

DoW components to ensure forward users are populating MedCOP with actionable data.

The JOMIS PMO should:

1. Implement prioritized fixes for problems identified with the HCD applications to ensure patient safety.
2. Correct data transfer deficiencies to enable the transfer of needed healthcare information from one HCD application to another as patients move through the continuum of care.
3. Ensure MedCOP displays accurate and complete data from external systems by improving its interoperability with those systems.

RECOMMENDATIONS

The JOMIS PMO should work with the Joint Staff Surgeon and Services to:

1. Define and prioritize the capabilities needed to document patient care in theater, including Service-specific use cases, so that the HCD applications address user expectations.
2. Develop standard operating procedures for MedCOP's use.
3. Issue a mandate for MedCOP's use across all combatant commands and