

# DoD Healthcare Management System Modernization (DHMSM®)



In May 2023, the Joint Interoperability Test Command (JITC) conducted an FOT&E of the DoD Healthcare Management System Modernization (DHMSM) expanded revenue capabilities. The DHMSM Program Management Office (PMO) will begin fielding the MHS GENESIS to medical treatment facilities outside of the continental United States in September 2023 and anticipates completion of these fielding activities before the end of FY24. DHMSM® and MHS GENESIS® are registered trademarks of the DHMSM PMO.

## SYSTEM DESCRIPTION

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MHS GENESIS is a modernized electronic health records system for the DoD, the Department of Veterans Affairs, the U.S. Coast Guard, and the National Oceanic and Atmospheric Administration, which creates a single healthcare record for each patient that can be utilized by all four organizations.

MHS GENESIS comprises three major elements: (1) the Millennium suite of applications, which provides medical capabilities; (2) Dentrax Enterprise, which provides dental capabilities; and (3) the Orion Rhapsody Integration Engine, which enables the majority of the external information exchanges.

The DHMSM PMO began deploying the Revenue Cycle Expansion (RevX) component of MHS GENESIS in April 2022. RevX covers all revenue features, to include patient scheduling, registration, pre-authorization, medical coding, claims submission, billing, and payment processing. It introduces new capabilities and workflows to support patient accounting and billing.

## MISSION

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DoD and other Federal Government medical staff use MHS GENESIS to manage delivery of healthcare within garrison facilities. DoD medical staff also use MHS GENESIS to perform administrative support, front

desk operations, logistics, billing, and business intelligence.

## PROGRAM

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DHMSM is an Acquisition Category ID program. DOT&E approved the Test and Evaluation Master Plan in October 2017, which describes testing to support the full deployment review and how T&E applies to the types of releases throughout the program life cycle.

In FY22, in response to DOT&E's FY21 recommendation, the program conducted an event to verify remediation of incident reports identified during previous operational testing. In August 2022, JITC conducted an operational assessment of RevX in Bremerton, Washington, at the request of the PMO, in order to identify potential critical risks prior to conducting an FOT&E event. In May 2023, JITC conducted the FOT&E of RevX in San Antonio, Texas, to evaluate operational effectiveness and suitability. This is the second FOT&E event, following the completion of the IOT&E in July 2018.

As of September 2023, the PMO reported that MHS GENESIS is deployed to 86 percent of healthcare facilities throughout the Defense Health Agency. The PMO continues to deploy RevX to new sites in conjunction with the initial Go-Live deployments of MHS GENESIS. RevX has also completed deployment to sites where MHS GENESIS had previously been deployed. MHS GENESIS is not currently

capable of operating in a denied or disconnected communications environment. The MHS GENESIS Theater (MHSG-T) capability, currently being jointly developed by the DHMSM and Joint Operational Medicine Information Systems (JOMIS) PMO, is intended to be interoperable with MHS GENESIS while operating in a denied, degraded, intermittent, or limited communications (DDIL) environment. However, MHSG-T is not currently intended to be a backup to MHS GENESIS across all MHS GENESIS sites.

### » MAJOR CONTRACTORS

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- Leidos – Reston, Virginia
- Oracle Health – Austin, Texas (Millennium suite)
- Henry Schein ONE – American Fork, Utah (Dentrax Enterprise)
- Accenture Federal Services – Arlington, Virginia

## TEST ADEQUACY

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JITC conducted an OT&E of the RevX capabilities in May 2023 at Joint Base San Antonio medical treatment facilities in accordance with the DOT&E-approved test plan and observed by DOT&E. As planned, JITC did not conduct cybersecurity testing of MHS GENESIS during this test event; the DHMSM PMO is conducting ongoing persistent cyber operations of the system to help maintain and improve its cyber survivability.

## PERFORMANCE

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### » EFFECTIVENESS, SUITABILITY, AND SURVIVABILITY

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DOT&E has not yet determined the operational effectiveness and suitability of RevX based on the FY23 operational testing but plans to release a report on its findings in 1QFY24.

DOT&E will determine the cyber survivability of RevX during a future FOT&E.

## RECOMMENDATIONS

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The DHMSM PMO should:

1. Continue to work with JITC to verify the remediation of incident reports identified during previous operational test events.
2. Engage with the JOMIS PMO to explore the feasibility of using MHSG-T as a backup capability for MHS GENESIS at all MHS GENESIS facilities, to ensure continuity of care in a DDIL environment.