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DISS Program

Connecting the DoD to the National Health Information Exchange

Interoperability and integration of healthcare data between agencies and systems is a critical requirement for our federal and civilian healthcare organizations.

In particular military medical systems and providers have many unique challenges to meet in order to provide the high standard of care we insist upon for our soldiers, veterans and their families. MANTECH provides critical systems integration and interoperability support for several key programs designed to meet these challenges.

A critical need – with IT systems poised to advance

The research on coordinated care is clear: Within the military healthcare system there's an urgent need for a way to share data since up to 60 percent of healthcare received by active duty personnel and 40 percent of veterans' healthcare is delivered by civilian medical professionals.

Patients experience better outcomes when medical teams operate within a connected healthcare ecosystem. Access to the patient's complete medical history helps physicians make better decisions, reduces medical errors, eliminates duplicate diagnostic testing and speeds up veteran beneficiary status determination.

During the past several years, the US government has undertaken a number of initiatives to encourage healthcare practitioners to adopt and use electronic health records (EHRs) within a Health Information Exchange (HIE).

What is DISS?

DISS is a contract vehicle for the Data Exchange Platform (DxP) - a component of the MHS Information Platform (MIP), a critical capability within the Enterprise Intelligence and Data Solutions (EIDS) portfolio which delivers an integrated capability with MHS GENESIS to seamlessly provide a

consolidated and standardized healthcare data exchange service made available to DoD, the Department of Veterans Affairs (VA), other federal agencies and external organizations including private sector healthcare providers. DISS supports the mission of improving care continuity, enabling clinical decision-making and modernizing healthcare interoperability across a distributed system-of-systems (SoS) environment.

DxP is a secure, scalable interoperability solution supporting national-level healthcare data exchange. As a core component of the MHS Information Platform (MIP), DxP supports both legacy and modern systems and enables seamless bidirectional data sharing.

Key facts:

- DxP enables connections through the Joint HIE (part of MHS GENESIS), linking to both the eHealth Exchange and the CommonWell Health Alliance.
- DxP integrates data from multiple DoD systems and repositories and shares with external partners like the VA and SSA.
- DISS continues the evolution of the original Virtual Lifetime Electronic Record (VLER) initiative, consolidating multiple legacy functions into a modern, cloud-native platform.

Core Capabilities

The DxP architecture managed under DISS includes application servers, cloud-native microservices, secure APIs and interfaces to both government and commercial partners. Its core functions include patient correlation, data prefetching, terminology mapping, standards translation and audit logging—all designed to comply with HIPAA and federal cybersecurity requirements.

DxP has improved the quality and quantity of patient information, resulting in better patient outcomes and overall patient care:

- Accelerated benefits adjudication and disability claims
- Real-time clinician access to longitudinal patient data
- Improved continuity and coordination of care
- Enhanced visibility across DoD, VA and civilian provider networks
- Reduction in record duplication and clinical data gaps

Our Support

MANTECH is the sole developer of the DxP. We designed and implemented the current cloud-native version of DxP, including its API Gateway, scalable microservices and support for RESTful FHIR interfaces. Under DISS, we continue to:

- Sustain and enhance the application servers that enable data sharing with wide array of partner systems, including national HIEs
- Onboard new data consumers and sources
- Integrate AI/ML-enhanced observability tools into system telemetry to identify performance and data quality issues

From early inception MANTECH has supported the DoD's and VA's efforts to pilot standards-based exchange and graduate it to the enterprise rollout. We have assisted our

Clients with the strategy, vision and requirements, while expanding into the system design, development, test and production operation.

Our support has helped the DoD to be successful as one of the initial health organizations navigating the eHealth Exchange on-boarding processes and procedures, including standards compliance and interoperability testing. To date, DISS supports secure data exchange with 1000+ private and federal partner endpoints. Our team has supported bi-directional sharing with two major national networks and led the largest data migration in DHA history to support this capability.

Innovating with AI

The DISS team is exploring and piloting artificial intelligence (AI) initiatives to enhance data deduplication, data quality monitoring and partner onboarding efficiency. These pilots include:

- AI-assisted data deduplication: Leveraging NLP to identify and suppress redundant clinical records across HL7, C-CDA and FHIR payloads.
- LLM-powered documentation support: Evaluating large language models to explain technical data provenance and assist users in interpreting shared record content.
- Pre-population of clinical forms: Piloting AI-enabled extraction and summarization of clinical data to automatically pre-fill Periodic Health Assessment (PHA) forms—reducing administrative burden for medical personnel and improving data accuracy.

While these capabilities are not yet fully deployed, our pilots demonstrate strong potential to further automate system operations, reduce cognitive burden on users and improve clinical confidence in exchanged data. These efforts align with the DoD's VAULTIS data strategy and future-focused modernization goals.

In business more than 57 years, MANTECH excels in cognitive cyber, AI, data collection & analytics, enterprise IT, systems engineering and software application development solutions that support national and homeland security.

LEARN MORE

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