

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 DES?

DoD Data Exchange Services (DES) is a system that delivers a single capability to seamlessly provide an integrated 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. It securely connects different health and benefit information systems and shares patient health information - virtual lifetime electronic record.

ManTech was chosen by the DoD to develop DES and streamline multiple existing legacy capabilities into a single, reliable data sharing mechanism. Requirements included reducing redundancy among existing systems and continuing to support secure and reliable exchange of standardized health data with all partners.

DES has its origins in Virtual Lifetime Electronic Records (VLER), a presidential initiative that was formed in 2009 to improve the quality of healthcare exchange between the DoD and the VA.

- VLER is part of a larger national health information exchange network, known as the eHealth Exchange.
- Through the eHealth Exchange, the DoD will be able to leverage VLER to exchange healthcare information with additional commercial and federal partners.

The DES system consists of gateway servers for interfacing to the eHealth Exchange, adaptor servers for implementing the business logic, and a local data store for patient



correlation, prefetching and HIPAA compliant audit logging. DES has improved the quality and quantity of patient information, resulting in better patient outcomes and overall patient care:

- · More efficient benefits processing
- Better-informed clinicians, service, and care providers
- Improved continuity and timeliness of care
- Enhanced awareness among all involved parties
- Elimination of gaps in health records

Our Support

ManTech is the developer of the DMIX DES System. We built the custom adaptor to enable data sharing between DoD and external providers through eHealth Exchange (formerly NHIN). We are currently live in production, exchanging with seven HIEs throughout the U.S., and are rapidly expanding enterprise-wide.

From early inception ManTech has supported the DoD's and VA's efforts to pilot sites and provide enterprise rollout. We

have assisted our client with the stratagy, vision and requirements, while expanding into the system design, development, test and production deployment.

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.

We support the DoD National Health Information Exchange initiatives by:

- Building and sustaining the custom adapter for DoD VLER Health Exchange - the highest volume HIE in the world sharing data between DoD and VA
- Ensuring interoperability of the data
- Supporting secure and reliable exchange of standardized health data with all partners
- Streamlining multiple existing capabilities into a single reliable data sharing mechanism

