FEDERAL ELECTRONIC HEALTH RECORD MODERNIZATION

2019 ANNUAL REPORT

OCTOBER 1, 2019 TO DECEMBER 31, 2019

William J. Tinston
Director
Federal Electronic Health Record
Modernization (FEHRM)
Program Office

Approved for public release: distribution unlimited

September 2020

Table of Contents

Figures

Introduction

This report outlines the activities of the Federal Electronic Health Record Modernization (FEHRM) program office during calendar year 2019 (CY2019) as required by section 715(f) of the National Defense Authorization Act for Fiscal Year 2020 (NDAA FY2020) (see Appendix A). Given the timing of interim leadership appointment and the signing of the charter, this report covers the last three months of CY2019 (October 1, 2019 to December 31, 2019).[1] Subsequent annual reports will cover the full calendar year.

The activities of the last three months of CY2019 laid the foundation for the FEHRM to drive the joint electronic health record (EHR) modernization effort forward. From the joint health information exchange to implementing the single, common EHR, the FEHRM continues to work with the Department of Defense (DOD), Department of Veterans Affairs (VA) and the Department of Homeland Security's United States Coast Guard (USCG) on technical, functional and programmatic issues. Additionally, the FERHM is working closely with the Office of National Coordinator for Health Information Technology (ONC) and national standards organizations to improve the continuity of care among and between public- and private-sector providers.

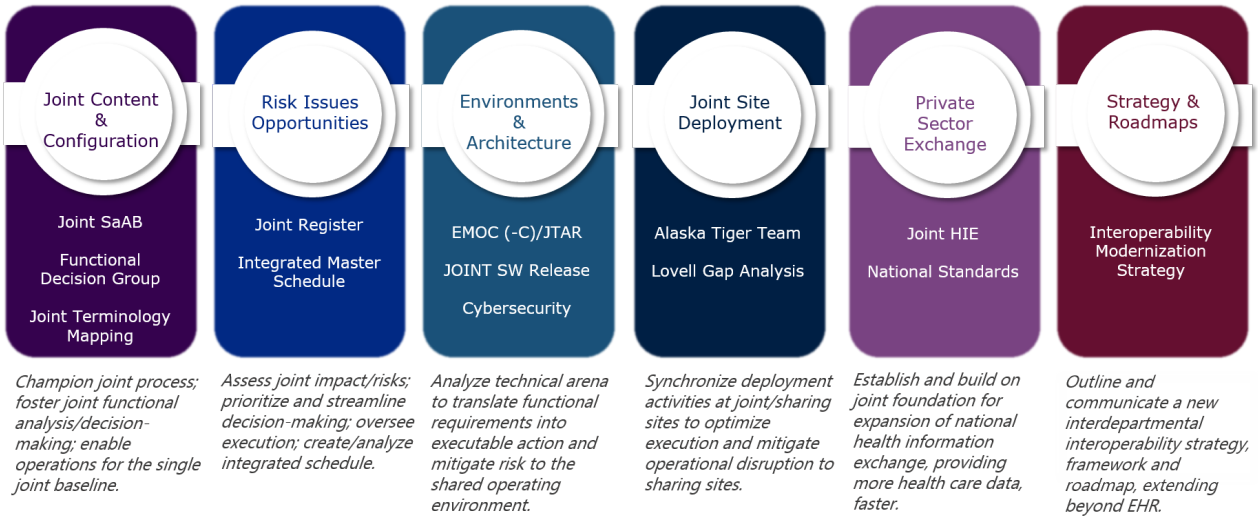
The FEHRM's mission is to ensure the single, common federal EHR supports more effective and efficient clinical decision-making and provides enhanced patient care. The FEHRM is achieving this mission by actively managing risks and the operation of the joint Federal Enclave; minimizing risks to EHR deployment and implementation; identifying opportunities for efficiency, standardization, and system and process optimization; and advancing interoperability across both the federal and private sectors.

Since its inception, the FEHRM has focused on the following priorities: determining organizational funding and resource alignment; developing a communications strategy and tools; conciliating joint issue lists and establishing a framework to manage risks, issues and opportunities; establishing a formal decision forum to reconcile issues; managing joint software releases and configuration; analyzing and planning for joint/synchronous deployments; establishing the joint health information exchange; and developing a shared Interoperability Modernization Strategy.

Looking ahead, a top-level graphic summary of the FEHRM fiscal year 2020 (FY2020) priorities is depicted in Figure 1.

[1] While the FEHRM was officially chartered on December 4, 2019, this report covers the roughly two months prior to that date in order to cover activities directly related to the standup and operation of the FEHRM.

Figure 1: FEHRM FY2020 Priorities

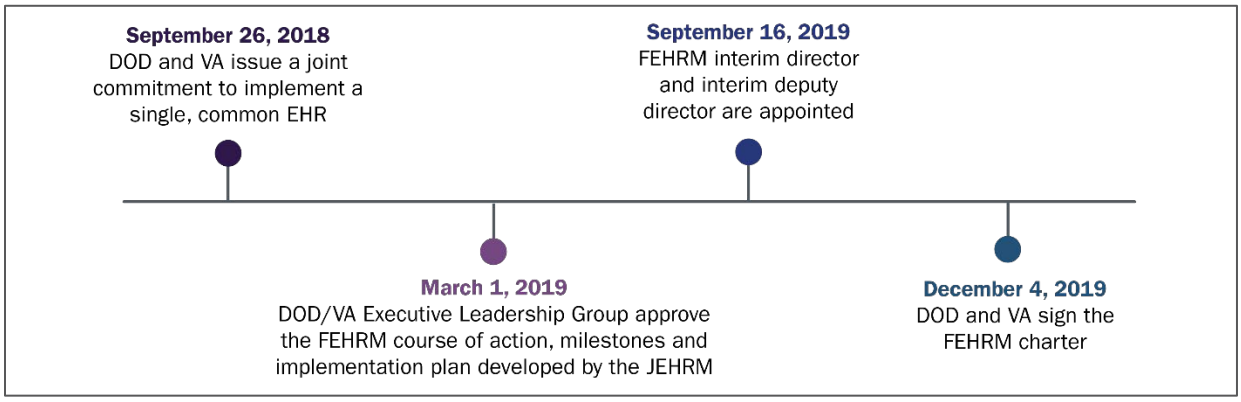


These priorities lay the foundation for operations of a single system, advance interoperability with the private sector and enable continuous capability delivery.

Background

The creation of the FEHRM is a result of a concerted, joint effort between DOD and VA, as seen in Figure 2.

Figure 2: Timeline of Significant Events in Establishing the FEHRM



In 2018, the Secretary of Defense and Secretary of Veterans Affairs issued a joint commitment to implement a "single, seamlessly integrated electronic health record (EHR) that will accurately and efficiently share health data between our two agencies and ensure health record interoperability with our supporting community healthcare providers." The letter emphasized "it is imperative that the DOD and VA work together to promote the best use of resources in pursuit of our common EHR modernization goals and objectives," and can be read in full at Appendix B.

As a result of this commitment, the DOD and VA leaders chartered the Joint Electronic Health Record Modernization Working Group (JEHRM) to develop recommendations for an organizational construct that would enable an agile, decision-making authority to efficiently adjudicate functional, technical and programmatic interoperability issues while advancing unity, synergy and efficiencies.

The JEHRM's efforts culminated in Department approval on March 2, 2019, for a joint office construct. Subsequently, the Departments committed to implementation planning and identified interim leadership to stand up the organization until completion of the executive recruiting process. The FEHRM Interim Director, Dr. Neil Evans, and Interim Deputy Director, Ms. Holly Joers, were appointed on September 16, 2019. The Deputy Secretary of Defense and Deputy Secretary of Veterans Affairs signed the FEHRM Charter (see Appendix C) on December 4, 2019.

FEHRM Activities Toward Implementing A Single, Common Federal EHR

Organizational Stand Up

The FEHRM was chartered on December 4, 2019, and replaced the Interagency Program Office (IPO). The establishment of the FEHRM charter marked a significant shift in authority and focus, coupled with an expanded mission. The charter established the FEHRM "to implement a single, common electronic health record (EHR) to enhance patient and provider effectiveness, regardless of the location of care" and charged FEHRM leadership with managing "an organizational structure to enable decision-making in the joint space."

This new organizational structure significantly shifted work from broad interoperability and standards work to management of critical initiatives to implement the joint system/common record. To support the implementation of a single, common EHR, the FEHRM established an agile operating model that identifies joint risks, issues and opportunities while driving stakeholders toward joint solutions. This operational model enables well-considered, timely decisions by engaging key stakeholders at all stages, and delegating decisions to the lowest practical level.

During the reporting period, the FEHRM laid the foundation for joint operations, with significant progress in a number of areas. These areas include interoperability, configuration management, evaluation and other key implementation milestones listed in section 715(f) of the NDAA FY2020. These activities are described in more detail within the following pages of this report.

Strategy for Interoperability

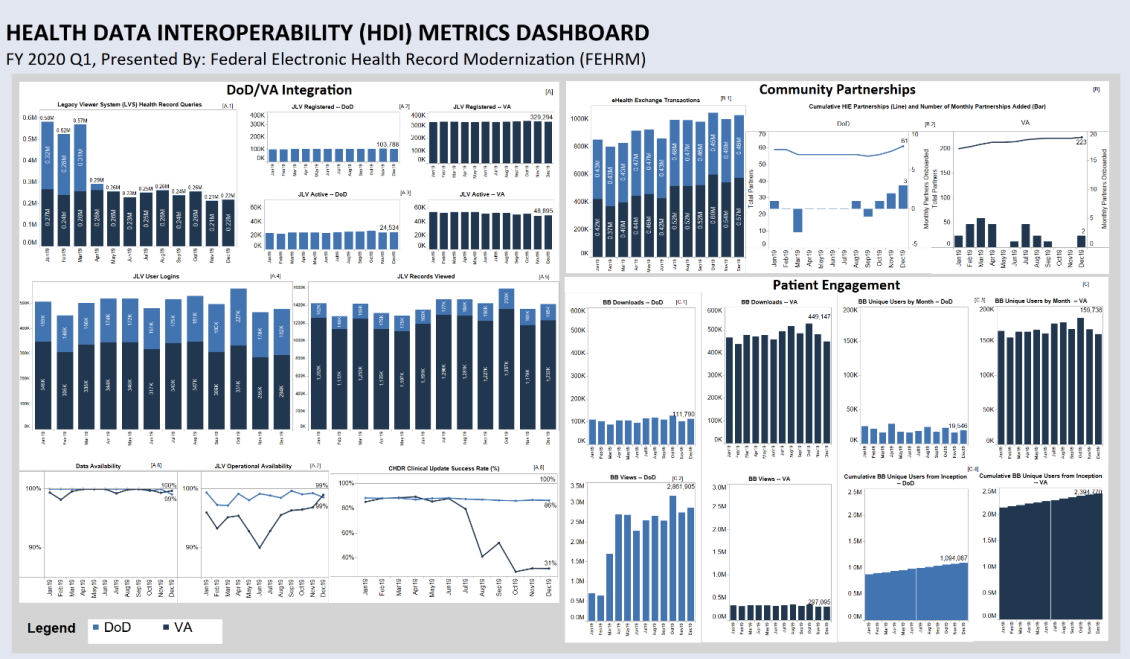
Looking Back: Progress During CY2019

During the last three months of CY2019, the FEHRM made significant progress toward enhancing interoperability, which is defined as the ability to exchange and use data in a meaningful way. Key accomplishments include:

- Finalized version eight of the Health Information Interoperability Technical Package (I2TP). This package is a foundational document that provides key interoperability and technical standards to DOD, VA and other key stakeholders.
- Led the Health Level Seven® International (HL7) community to consensus on the *Basic Provenance for Consolidated Clinical Document Architecture (C-CDA) and Fast Healthcare Interoperability Resources (FHIR)* standard, defining testable technical interpretations of ONC interoperability requirements, which are referenced and required in ONC's final interoperability rule of Spring 2020 in support of the Twenty-First Century Cures Act. The *Basic Provenance for C-CDA and FHIR* standard provides the functional and technical foundations for communicating 'Minimum Viable Provenance' in CDA and FHIR formats, improving transparency into the origins of data, and promoting trust across sharing partners.
- Participated in the October 2019 HL7 ballot cycle, which informed the development and maintenance of national standards for data exchange. This included voting and commenting on nine ballots on emerging health data standards, including Basic Provenance for C-CDA and FHIR. HL7 helps provide standards and solutions for interoperability challenges.
- Hosted Interoperability Standards and Documentation Change Control Boards to analyze and approve DOD and VA clinical data maps for EHR implementation.
- Hosted Interoperability Standards and Documentation Change Control Boards to analyze and approve DOD and VA clinical terminology data maps for Joint Longitudinal Viewer (JLV) interoperability.

Additionally, the FEHRM evaluated Health Data Interoperability Metrics to track progress toward modernization and enhancement of health data interoperability. Figure 3 shows a snapshot of the baseline metrics from the last three months of CY2019.

Figure 3: Baseline Health Data Interoperability Metrics (October 2019–December 2019)



Looking Ahead: Goals for CY2020 and Beyond

DOD and VA leaders as well as subject matter experts are working collaboratively to develop an updated Interoperability Modernization Strategy and Plan. This strategy and plan focuses on improving care and coordination of services and benefits and delivering value. It will provide a framework for interoperability that will remain relevant as new technologies emerge and the care and benefits landscape evolves.

The Interoperability Modernization Strategy and Plan will also establish a roadmap to provide a seamless health care and benefits experience for beneficiaries and guide DOD and VA in implementing existing and new interoperability initiatives.

Implementation Milestones

Section 715(f) of the NDAA FY2020 requires the FEHRM to report on the following implementation milestones:

- Entering into an agreement with an independent entity to conduct an evaluation of the EHR no later than October 1, 2021;
- Maintaining a common configuration baseline for the EHR, continually evaluating the state of configuration and the impact on interoperability and promoting the enhancement of the EHR;
- Convening an annual meeting of DOD, VA and USCG clinical staff, community providers and other leading clinical experts to assess the state of clinical use of the EHR and whether the EHR is meeting clinical and patient needs; and

- Conducting a clinical and patient satisfaction survey on at least a biannual basis regarding clinical use and patient experience with the single, common EHR, beginning October 1, 2021.

The status of these milestones are described below.

Evaluating the Single, Common Federal EHR

The FEHRM will establish an agreement by October 1, 2021, with an independent entity to evaluate the single, common federal EHR and assess interoperability, including whether DOD and VA clinicians can access, and meaningfully interact with, patient health records created by each other and the private sector.

Maintaining a Common Configuration Baseline

During the last three months of CY2019, the FEHRM initiated management activities for maintaining the configuration baseline for the single, common federal EHR. Accomplishments include:

- Championing a Joint Sustainment and Adoption Board (JSaAB) and Joint Configuration Control Board (CCB);
- Planning a JSaAB rehearsal of concept drill with DOD and VA functional champions for quarter two of fiscal year 2020;
- Initiating a joint DOD and VA workgroup to transition the DOD issue resolution process to a joint issue resolution process, to culminate with approval of changes by the JSaAB;
- Leading weekly Functional Decision Group (FDG) meetings to evaluate joint functional issues impacting the implementation and sustainment of the joint EHR;
- Collaborating on the first joint software baseline release, which incorporated capabilities needed to deploy the new EHR at Mann-Grandstaff VA Medical Center in Spokane, Washington and its four community-based outpatient clinics;
- Refocusing the weekly Environment Management Operations Center (EMOC) and supporting activities to aggressively identify and resolve impacts due to the scheduled use of shared resources in the common EHR hosting environment, as well as identifying opportunities and implementation efficiencies for DOD and VA;
- Evaluating Sharing Site Agreements to determine shared services, billing and reimbursement provisions and methodologies;
- Establishing a new process to transform a joint decision list to capture a single source for joint risks, issues and opportunities;
- Utilizing the Solution Testing Partner code program to enable early-access to nascent capabilities and advance single, common record development;
- Driving key decisions on the shared accreditation process for medical devices, the troubleshooting of VA's information routing on DS Logon outages and the use of the electronic data interchange personal identifier (EDIPI) as an interim solution for the

joint access management through the Interagency Technology Steering Committee, and supporting policy waivers and formal guidance for standing up the Joint Cybersecurity Service Provider; and

- Leading the Joint Engineering and Architecture Working Group with a focus on health information exchange activities.

These efforts laid the groundwork for expanding and enhancing the use of a single, common federal EHR.

Convening an Annual Meeting of Clinical Staff

Since the FEHRM was not chartered until December 4, 2019, the annual meeting of DOD, VA and USCG clinical staff, community providers and other leading clinical experts did not occur.

Conducting a Clinical and Patient Satisfaction Survey

The clinical and patient satisfaction survey is not required to occur until October 1, 2021. As such, progress on this survey will be reported in the CY2021 annual report.

Amounts Expended for FEHRM Activities and Purpose

In support of these activities, over the last three months of CY2019, the FEHRM obligated a combined total of $5.16 million from DOD and VA funds. These funds were allocated toward civilian employees and Public Health Service officers' salaries; rent; general management and administration; program management; engineering and testing support; functional community requirements; and software licenses and maintenance.

The FY20 funding is sufficient to carry out the activities of the FEHRM.

Figure 4: Financial Summary

Federal Electronic Health Record Modernization (FEHRM)	FY20 O&M $M	FY18/19 O&M $M	FY 20 Pay Admin $M	FY20 O&M $M
	DoD	VA OIT	VA OIT	VHA
Labor - Government Employee Government employee costs	$ 0.367		$ 0.519	$ 0.175
Labor - Government Matrix Government matrix employee costs	$ 0.236			
Labor - Military Matrix Military matrix employee costs	$ 0.105			
Labor - Support Contractor Support contractor costs	$ 1.567	$ 2.033		$ 0.109
Other Other non-descriptive costs	$ 0.015			$ 0.002
TDY - Travel Travel and lodging related costs	$ 0.011		$ 0.016	$ 0.004
FY20 Q1 Total	**$ 2.301**	**$ 2.033**	**$ 0.535**	**$ 0.289**
	DoD	**VA**	**TOTAL FY20 Q1 FEHRM FUNDING**	
	$ 2.301	**$ 2.86**	**$ 5.16**	

Appendix A: Section 715 of the National Defense Authorization Act for Fiscal Year 2020

S.1790 - National Defense Authorization Act for Fiscal Year 2020
116th Congress (2019-2020)
Latest Action: 12/20/2019 Became Public Law No: 116-92

AT THE FIRST SESSION
Begun and held at the City of Washington on Thursday, the third day of January, two thousand and nineteen

To authorize appropriations for fiscal year 2020 for military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy, to prescribe military personnel strengths for such fiscal year, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "National Defense Authorization Act for Fiscal Year 2020".

https://www.congress.gov/bill/116th-congress/senate-bill/1790/text#toc-H6CE1BBA8D0A44FED8CDA8D976A04ABE8

SEC. 715. IMPROVEMENTS TO INTERAGENCY PROGRAM OFFICE OF THE DEPARTMENT OF DEFENSE AND THE DEPARTMENT OF VETERANS AFFAIRS.

(a) LEADERSHIP.—Subsection (c) of section 1635 of the Wounded Warrior Act (title XVI of Public Law 110–181; 10 U.S.C. 1071 note) is amended to read as follows:

"(c) LEADERSHIP.—

"(1) DIRECTOR.—The Director of the Office shall be the head of the Office.

"(2) DEPUTY DIRECTOR.—The Deputy Director of the Office shall be the deputy head of the Office and shall assist the Director in carrying out the duties of the Director.

"(3) REPORTING.—The Director shall report directly to the Deputy Secretary of Defense and the Deputy Secretary of Veterans Affairs.

"(4) APPOINTMENTS.—

"(A) DIRECTOR.—The Director shall be appointed by the Secretary of Defense, with the concurrence of the Secretary of Veterans Affairs, for a fixed term of four years. For the subsequent term, the Secretary of Veterans Affairs, with the concurrence of the Secretary of Defense, shall appoint the Director for a fixed term of four years, and thereafter, the appointment of the Director for a fixed term of four years shall alternate between the Secretaries.

"(B) DEPUTY DIRECTOR.—The Deputy Director shall be appointed by the Secretary of Veterans Affairs, with the concurrence of the Secretary of Defense, for a fixed term of four years. For the subsequent term, the Secretary of Defense, with the concurrence of the Secretary of Veterans Affairs, shall appoint the Deputy Director for a fixed term of four years, and thereafter, the appointment of the Deputy Director for a fixed term of four years shall alternate between the Secretaries.

"(C) MINIMUM QUALIFICATIONS.—The Secretary of Defense and the Secretary of Veterans Affairs shall jointly develop qualification requirements for the Director and the Deputy Director. Such requirements shall ensure that, at a minimum, the Director and Deputy Director, individually or together, meet the following qualifications:

"(i) Significant experience at a senior management level fielding enterprise-wide technology in a health care setting, or business systems in the public or private sector.

"(ii) Credentials for enterprise-wide program management.

"(iii) Significant experience leading implementation of complex organizational change by integrating the input of experts from various disciplines, such as clinical, business, management, informatics, and technology.

"(5) SUCCESSION.—The Secretary of Defense and the Secretary of Veterans Affairs shall jointly develop a leadership succession process for the Office.

"(6) ADDITIONAL GUIDANCE.—The Department of Veterans Affairs-Department of Defense Joint Executive Committee may provide guidance in the discharge of the functions of the Office under this section.

"(7) INFORMATION TO CONGRESS.—Upon request by any of the appropriate committees of Congress, the Director and the Deputy Director shall testify before such committee, or provide a briefing or otherwise provide requested information to such committee, regarding the discharge of the functions of the Office under this section.".

(b) AUTHORITY.—Paragraph (1) of subsection (b) of such section is amended by adding at the end the following new sentence: "The Office shall carry out decision making authority delegated to the Office by the Secretary of Defense and the Secretary of Veterans Affairs

with respect to the definition, coordination, and management of functional, technical, and programmatic activities that are jointly used, carried out, and shared by the Departments.".

(c) PURPOSES.—Paragraph (2) of subsection (b) of such section is amended by adding at the end the following new subparagraphs:

"(C) To develop and implement a comprehensive interoperability strategy, which shall include—

"(i) the Electronic Health Record Modernization Program of the Department of Veterans Affairs; and

"(ii) the Healthcare Management System Modernization Program of the Department of Defense.

"(D) To pursue the highest level of interoperability for the delivery of health care by the Department of Defense and the Department of Veterans Affairs.

"(E) To accelerate the exchange of health care information between the Departments, and advances in the health information technology marketplace, in order to support the delivery of health care by the Departments.

"(F) To collect the operational and strategic requirements of the Departments relating to the strategy under subsection (a) and communicate such requirements and activities to the Office of the National Coordinator for Health Information Technology of the Department of Health and Human Services for the purpose of implementing title IV of the 21st Century Cures Act (division A of Public Law 114–255), and the amendments made by that title, and other objectives of the Office of the National Coordinator for Health Information Technology.

"(G) To plan for and effectuate the broadest possible implementation of standards, specifically with respect to the Fast Healthcare Interoperability Resources standard or successor standard, the evolution of such standards, and the obsolescence of such standards.

"(H) To actively engage with national and international health standards setting organizations, including by taking membership in such organizations, to ensure that standards established by such organizations meet the needs of the Departments pursuant to the strategy under subsection (a), and oversee and approve adoption of and mapping to such standards by the Departments.

"(I) To express the content and format of health data of the Departments using a common language to improve the exchange of data between the Departments and with the private sector, and to ensure that clinicians of the Departments have access to integrated, computable, comprehensive health records of patients.

"(J) To inform the Chief Information Officer of the Department of Defense and the Chief Information Officer of the Department of Veterans Affairs of any activities of the Office affecting or relevant to cybersecurity.

"(K) To establish an environment that will enable and encourage the adoption by the Departments of innovative technologies for health care delivery.

"(L) To leverage data integration to advance health research and develop an evidence base for the health care programs of the Departments.

"(M) To prioritize the use of open systems architecture by the Departments.

"(N) To ensure ownership and control by patients of personal health information and data in a manner consistent with applicable law.

"(O) To prevent contractors of the Departments or other non-departmental entities from owning or having exclusive control over patient health data, for the purposes of protecting patient privacy and enhancing opportunities for innovation.

"(P) To implement a single lifetime longitudinal personal health record between the Department of Defense and the Department of Veterans Affairs.

"(Q) To attain interoperability capabilities—

"(i) sufficient to enable the provision of seamless health care by health care facilities and providers of the Departments, as well as private sector facilities and providers contracted by the Departments; and

"(ii) that are more adaptable and far reaching than those achievable through bidirectional information exchange between electronic health records of the exchange of read-only data alone.

"(R) To make maximum use of open-application program interfaces and the Fast Healthcare Interoperability Resources standard (or successor standard)."

(d) IMPLEMENTATION MILESTONES.—Subsection (e) of such section is amended to read as follows:

"(e) IMPLEMENTATION MILESTONES.—

"(1) EVALUATION.—With respect to the electronic health record systems of the Department of Defense and the Department of Veterans Affairs, the Office shall seek to enter into an agreement with an independent entity to conduct an evaluation by not later than October 1, 2021 of the following:

"(A) Whether a clinician of the Department of Defense, can access, and meaningfully interact with, a complete patient health record of a veteran, from a military medical treatment facility.

"(B) Whether a clinician of the Department of Veterans Affairs can access, and meaningfully interact with, a complete patient health record of a member of the Armed Forces serving on active duty, from a medical center of the Department of Veterans Affairs.

"(C) Whether clinicians of the Departments can access, and meaningfully interact with, the data elements of the health record of a patient who is a veteran or is a member of the Armed Forces which are generated when the individual receives health care from a community care provider of the Department of Veterans Affairs or a TRICARE program provider of the Department of Defense.

"(D) Whether a community care provider of the Department of the Veterans Affairs and a TRICARE program provider of the Department of Defense on a Health Information Exchange-supported electronic health record can access patient health records of veterans and active-duty members of the Armed Forces from the system of the provider.

"(E) An assessment of interoperability between the legacy electronic health record systems and the future electronic health record systems of the Department of Veterans Affairs and the Department of Defense.

"(F) An assessment of the use of interoperable content between—

"(i) the legacy electronic health record systems and the future electronic health record systems of the Department of Veterans Affairs and the Department of Defense; and

"(ii) third-party applications.

"(2) SYSTEM CONFIGURATION MANAGEMENT.—The Office shall—

"(A) maintain the common configuration baseline for the electronic health record systems of the Department of Defense and the Department of Veterans Affairs; and

"(B) continually evaluate the state of configuration and the impacts on interoperability; and

"(C) promote the enhancement of such electronic health records systems.

"(3) CONSULTATION.—

"(A) ANNUAL MEETING REQUIRED.—Not less than once per year, the Office shall convene a meeting of clinical staff from the Department of Defense, the Department of Veterans Affairs, the Coast Guard, community providers, and other leading clinical experts,

for the purpose of assessing the state of clinical use of the electronic health record systems and whether the systems are meeting clinical and patient needs.

"(B) RECOMMENDATIONS.—Clinical staff participating in a meeting under subparagraph (A) shall make recommendations to the Office on the need for any improvements or concerns with the electronic health record systems.

"(4) CLINICAL AND PATIENT SATISFACTION SURVEY.—Beginning October 1, 2021, and on at least a biannual basis thereafter until 2025 at the earliest, the Office shall undertake a clinician and patient satisfaction survey regarding clinical use and patient experience with the electronic health record systems of the Department of Defense and the Department of Veterans Affairs.".

(e) RESOURCES AND STAFFING.—Subsection (g) of such section is amended—

(1) in paragraph (1), by inserting before the period at the end the following: ", including the assignment of clinical or technical personnel of the Department of Defense or the Department of Veterans Affairs to the Office"; and

(2) by adding at the end the following new paragraphs:

"(3) COST SHARING.—The Secretary of Defense and the Secretary of Veterans shall enter into an agreement on cost sharing and providing resources for the operations and staffing of the Office.

"(4) HIRING AUTHORITY.—The Secretary of Defense and the Secretary of Veterans Affairs shall delegate to the Director the authority under title 5, United States Code, regarding appointments in the competitive service to hire personnel of the Office.".

(f) REPORTS.—Subsection (h) of such section is amended to read as follows:

"(h) REPORTS.—

"(1) ANNUAL REPORTS.—Not later than September 30, 2020, and each year thereafter through 2024, the Director shall submit to the Secretary of Defense and the Secretary of Veterans Affairs, and to the appropriate committees of Congress, a report on the activities of the Office during the preceding calendar year. Each report shall include the following:

"(A) A detailed description of the activities of the Office during the year covered by such report, including a detailed description of the amounts expended and the purposes for which expended.

"(B) With respect to the objectives of the strategy under paragraph (2)(C) of subsection (b), and the purposes of the Office under such subsection—

"(i) a discussion, description, and assessment of the progress made by the Department of Defense and the Department of Veterans Affairs during the preceding calendar year; and

"(ii) a discussion and description of the goals of the Department of Defense and the Department of Veterans Affairs for the following calendar year, including updates to strategies and plans.

"(C) A detailed financial summary of the activities of the Office, including the funds allocated to the Office by each Department, the expenditures made, and an assessment as to whether the current funding is sufficient to carry out the activities of the Office.

"(D) A detailed description of the status of each of the implementation milestones, including the nature of the evaluation, methodology for testing, and findings with respect to each milestone under subsection (e).

"(E) A detailed description of the state of the configuration baseline, including any activities which decremented or enhanced the state of configuration under subsection (e).

"(F) With respect to the annual meeting required under subsection (e)(3)—

"(i) a detailed description of activities, assessments, and recommendations relating to such meeting; and

"(ii) the response of the Office to any such recommendations.

"(2) AVAILABILITY.—Each report under this subsection shall be made publicly available."

(g) DEFINITIONS.—Such section is further amended by adding at the end the following new subsection (k):

"(k) DEFINITIONS.—In this section:

"(1) The term 'appropriate congressional committees' means—

"(A) the congressional defense committees; and

"(B) the Committees on Veterans' Affairs of the House of Representatives and the Senate.

"(2) The term 'configuration baseline' means a fixed reference in the development cycle or an agreed-upon specification of a product at a point in time that serves as a documented basis for defining incremental change in all aspects of an information technology product.

"(3) The term 'Electronic Health Record Modernization Program' has the meaning given that term in section 503 of the Veterans Benefits and Transition Act of 2018 (Public Law 115–407; 132 Stat. 5376).

"(4) The term 'interoperability' means the ability of different information systems, devices, or applications to connect, regardless of the technology platform or the location where care is provided—

"(A) in a coordinated and secure manner, within and across organizational boundaries, and across the complete spectrum of care, including all applicable care settings;

"(B) with relevant stakeholders, including the person whose information is being shared, to access, exchange, integrate, and use computable data regardless of the origin or destination of the data or the applications employed;

"(C) with the capability to reliably exchange information without error;

"(D) with the ability to interpret and to make effective use of such exchanged information;

"(E) with the ability for information that can be used to advance patient care to move between health care entities; and

"(F) without additional intervention by the end user.

"(5) The term 'meaningfully interact' means the ability to view, consume, act upon, and edit information in a clinical setting to facilitate high-quality clinical decision making.

"(6) The term 'seamless health care' means health care which is optimized through access by patients and clinicians to integrated, relevant, and complete information about the clinical experiences of the patient, social and environmental determinants of health, and health trends over time, in order to enable patients and clinicians to—

"(A) move efficiently within and across organizational boundaries;

"(B) make high-quality decisions; and

"(C) effectively carry out complete plans of care.

"(7) The term 'Secretary concerned' means—

"(A) the Secretary of Defense, with respect to matters concerning the Department of Defense;

"(B) the Secretary of Veterans Affairs, with respect to matters concerning the Department of Veterans Affairs; and

"(C) the Secretary of Homeland Security, with respect to matters concerning the Coast Guard when it is not operating as a service in the Department of the Navy.

"(8) The term 'TRICARE program' has the meaning given that term in section 1072 of title 10, United States Code.".

(h) INTEROPERABILITY STRATEGY.—

(1) REPORT REQUIRED.—0

with respect to electronic health records jointly developed by the Secretary of Defense and Secretary of Veterans Affairs, including any accompanying or associated implementation plans and supporting plans.

(2) ELEMENTS.—The comprehensive interoperability strategy under paragraph (1) shall discuss the purposes described in paragraphs (K) through (R) of section 1635(b)(2) of the Wounded Warrior Act (title XVI of Public Law 110–181; 10 U.S.C. 1071 note), as amended by subsection (c).

(3) DEFINITIONS.—In this subsection:

(A) The term "appropriate congressional committees" means—

(i) the Committees on Armed Services of the Senate and the House of Representatives; and

(ii) the Committees on Veterans' Affairs of the Senate and the House of Representatives.

(B) The term "Director" means the individual described in section 1635(c) of the Wounded Warrior Act (title XVI of Public Law 110–181; 10 U.S.C. 1071 note), as amended by subsection (a).

(C) The term "interoperability" has the meaning given that term in subsection (k) of such section, as added by subsection (g).

(i) CONFORMING REPEAL.—Section 713 of the National Defense Authorization Act for Fiscal Year 2014 (Public Law 113–66; 10 U.S.C. 1071 note) is repealed.

Appendix B: EHRM Joint Commitment Statement

Secretary of Defense and Secretary of Veterans Affairs

Electronic Health Record Modernization Joint Commitment

September 26, 2018

The Department of Defense and Department of Veterans Affairs are jointly committed to implementing a single, seamlessly integrated electronic health record (EHR) that will accurately and efficiently share health data between our two agencies and ensure health record interoperability with our networks of supporting community healthcare providers. It remains a shared vision and mission to provide users with the best possible patient-centered EHR solution and related platforms in support of the lifetime care of our Service members, Veterans, and their families.

The importance, magnitude, and overall financial investment of our EHR modernization efforts demand the alignment of plans, strategies, and structure across the two Departments. To this end, the DoD and VA will institute an optimal organizational design that prioritizes accountability and effectiveness, while continuing to advance unity, synergy, and efficiencies between our two Departments. Together, our two Departments will develop a more efficient overall construct and plan of execution that includes:

- An accountability mechanism that facilitates coordinated decision making and oversight;
- An organizational structure that supports the delivery of a single, seamlessly integrated EHR that maximizes commercial health record interoperability;
- Optimally coordinated clinical and business workflows, operations, data management, and technology solutions;
- A detailed implementation timeline.

The DoD and VA EHR modernization teams continue to work their respective EHR program implementations, while maximizing collaborative strategies, opportunities, and projects whenever possible. We cannot think of a more vital mission than caring for the men and women who faithfully serve, and have served our country. It is imperative that the DoD and VA work together to promote the best use of resources in pursuit of our common EHR modernization goals and objectives.

James N. Mattis
Secretary of Defense

Robert L. Wilkie
Secretary of Veterans Affairs

Appendix C: FEHRM Charter

Department of Defense / Veterans Affairs

2019 Federal Electronic Health Record Modernization (FEHRM) Program Office

CHARTER

Scope: The Federal Electronic Health Record Modernization (FEHRM) Program Office is authorized by existing statutes that established the Department of Defense/Veterans Affairs (DoD/VA) Interagency Program Office (IPO). This Charter supersedes all previous IPO Charters, and the organization will henceforth be referred to as the FEHRM. It becomes effective upon signatures by both Departments, and will be re-evaluated every two years and modified, as necessary. Modifications will be made in writing and with the written consent of both VA and DoD Deputy Secretaries.

Purpose: The FEHRM's primary mission is to implement a single common federal electronic health record (EHR) to enhance patient care and provider effectiveness, regardless of the location of care. The modern, secure electronic health record enables an integrated patient-centered continuum of care, to include nationwide health information exchange and adoption of interoperable health care data standards.

The FEHRM serves as a single point of accountability in the delivery of a common record that contributes to full interoperability of health care information between the Departments themselves and will advance interoperability with the private sector. To further that purpose, as outlined in the September 26, 2018 Joint Commitment letter signed by the VA and DoD Secretaries, the FEHRM is chartered to be an agile, single decision-making authority that efficiently manages implementation risk, to include potential functional, technical, and programmatic issues, in support of the Departments' single, seamless integrated EHR objectives.

Structure: The Director and Deputy Director manage an organizational structure to enable decision-making in the joint space and to implement the stated objectives and responsibilities. The structure evolves as the organization matures with changes captured through updates in a FEHRM Implementation Plan.

With the exception of acquisition matters, the FEHRM Director and Deputy Director report to the Deputy Secretary of Defense and the Deputy Secretary of Veterans Affairs.

For all DoD Acquisition matters, the FEHRM Director and Deputy Director report to the Under Secretary of Defense for Acquisition and Sustainment (USD (A&S)). For all VA acquisition matters, the FEHRM Director and Deputy Director report to the VA Deputy Secretary, as Chair of the VA Operations Board.

Objectives

- Actively manage risks and the operation of the joint EHR Federal Enclave;
- Minimize risk to the Departments' deployment/implementation;
- Identify opportunities for efficiency, standardization and system/process optimization; and
- Advance interoperability across the federal and private sectors.

1

Responsibilities

Subject to the direction of the Deputy Secretaries of Veterans Affairs and Defense, the FEHRM Director and Deputy Director:

- Provide direction and oversight for the execution of joint functions;
  Note: The attached Appendix includes baseline joint functions as captured by the Joint Electronic Health Record Modernization Working Group. Execution of the baseline is iterative and is assessed and refined by FEHRM leadership, as necessary, to perform the objectives and responsibilities outlined in this charter.
- Analyze opportunities for synergies and advocate for implementation of efficiencies, standardization and system/process optimization;
- Analyze and integrate deployment activities at all joint and VA-DoD sharing sites;
- In conjunction with the Departments, synchronize with the National Coordinator for Health Information Technology and other stakeholders to support enhanced interoperability across the federal and private sectors;
- Determine resources required for FEHRM mission execution (personnel, budget, etc.);
- Direct the activities of all personnel within, aligned, or detailed to the FEHRM to include providing input to and ensuring assigned personnel are evaluated in accordance with the performance management systems of their respective Departments;
- Work with both Departments to formulate, oversee, de-conflict, and ensure adherence to EHR-related VA and DoD policies, as applicable;
- Assist the Departments to prepare, brief, and defend budget requests required to support interagency initiatives that are under the authority and direction of the FEHRM; and
- Brief and respond to inquiries from Congressional Members, Committees and their staffs, and testify, when requested, at hearings related to joint EHR implementation efforts.

Key Stakeholders:

- **Joint Executive Committee (JEC):** provides high-level, overarching guidance concerning FEHRM activities; co-chaired by the Deputy Secretary of Veterans Affairs and the Under Secretary of Defense for Personnel & Readiness (USD P&R);
- **DoD/VA IPO Executive Committee (EXCOM):** advises the FEHRM regarding execution of its purpose and responsibilities; co-chaired by the USD(A&S) and the VA Chief Information Officer for VA's Office of Information & Technology (OIT);
- **VA Operations Board:** provides VA performance/operations oversight; chaired by the Deputy Secretary of Veterans Affairs;
- **Senior Steering Group (SSG)/Configuration Steering Board (CSB):** provides DoD acquisition oversight and approval of major requirement changes; co-chaired by USD (A&S) and the Assistant Secretary of Defense for Health Affairs (ASD(HA));
- **Functional Champions:** the FEHRM partners with the Functional Champions appointed by the respective Departments as the "single voice" of functional requirements;
- **EHR Program Offices:** VA's Office of Electronic Health Record Modernization (OEHRM), and DoD's Healthcare Management System Modernization (DHMSM) Program

Management Offices, execute Department-specific actions informed by and consistent with FEHRM direction regarding joint decisions; and

- **Chief Information Officers (CIOs):** the FEHRM engages with respective Department/Agency CIOs (OIT, DHA-IO, DoD CIO) responsible for information technology management to ensure the effective implementation of the electronic health record in accordance with formal Interagency Agreements and Memoranda of Agreement/Understanding.

Additional Terms

- The FEHRM complies with all applicable laws, rules and regulations in connection with the performance of its obligations and responsibilities under this Charter.
- With respect to funding, each Department is responsible for all personnel expenses of its respective personnel and all contract expenses of its respective contracts. Other administrative expenses are shared equitably or as otherwise agreed to by the Chief Financial Officers of the two Departments. All funding responsibilities are subject to the availability of appropriations.

DEC 0 4 2019

David L. Norquist
Deputy Secretary of Defense

James Byrne
Deputy Secretary of Veterans Affairs

References

a. Section 1635 of the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2008, Pub. L. 110-181, as amended by Section 252 of the Duncan Hunter NDAA for FY09, Pub. L. 110-417.
b. Section 713 of the NDAA for FY 2014, Pub. L. 113-66.
c. Pub. L. 104-113, National Technology Transfer and Advancement Act of 1995
d. 38 USC § 8111, Sharing of Department of Veterans Affairs and Department of Defense health care resources.
e. Department of Defense Instruction (DODI) 6010.23, DoD and Department of VA Health Care Resource Sharing Program, January 23, 2012, incorporating Change 1, effective 3 October 2013.
f. 38 U.S.C. § 320, Department of Veterans Affairs-Department of Defense Joint Executive Committee.
g. Veterans Health Administration Directive 1660, Health Care Resources Sharing with the Department of Defense, July 29, 2015.
h. Joint Commitment Letter, September 26, 2018.
i. Department of Defense and Department of Veterans Affairs Joint Electronic Health Record Modernization Working Group Recommended Course of Action Approval, Feb 27, 2019 (DoD) and March 27, 2019 (VA).
j. Memorandum of Agreement between Department of Defense and Department of Veterans Affairs for Implementation of the Medical Community of Interest Network, Oct 28, 2019

APPENDIX:

This appendix includes baseline joint functions proposed by the Joint Electronic Health Record Modernization Working Group for direction and oversight by the FEHRM. Execution of baseline functions is iterative and is assessed and refined by FEHRM leadership as necessary to perform objectives and responsibilities outlined in this charter. This is documented in a regularly-updated FEHRM Implementation Plan.

As a point of emphasis, the FEHRM's primary role is direction and oversight for the **joint** aspects of electronic health record (EHR) Modernization. The **joint** requirements are significant, given plans to implement a single instance of a modernized EHR across the involved Departments.

- **Joint Federal Enclave:** Management of the Federal Enclave (joint hosting environment) that is jointly accessible over approved networks supporting the EHR;
- **Joint Configuration Management/Change Control Board**: Disciplined process for maintaining systems and software in a known, baselined, consistent state; including joint release management;
- **Cybersecurity**: Manage the joint cybersecurity program to include approved medical devices and associated interfaces for the joint hosting environment and deployed system components consistent with cybersecurity requirements and risk management framework processes;
- **Interfaces to Enclave (Joint & Department-Specific)**: disciplined process for ensuring interfaces are appropriately assessed, developed, and managed as required;
- **Ensuring Networks/Network Security**: Compliance with security requirements in Memorandum of Agreement between Department of Defense and Department of Veterans Affairs for Implementation of the Medical Community of Interest Network (dated October 28 2019) for joint networks and network security to protect the usability and integrity of the network and data (both hardware and software), and access to the network;
- **End-to-End Performance Monitoring/Troubleshooting**: Manage joint end-to-end performance to collect, monitor, and report on the overall operational health of the joint hosting environment and deployed components to enable end-users, administrators, and organizations to gauge and evaluate the performance of a given system which supports the joint EHR;
- **System-of-Systems Engineering**: Joint System-of-Systems engineering process to provide the technical definition, activities, and resource planning necessary to execute technical requirements, to enforce technical and functional requirements, and to identify the need for, and ensure execution of, all required Interagency Agreements, Memoranda of Agreement/Understanding, and Interconnection Security Agreements;
- **Joint Disaster Recovery/Continuity of Operations Plan**: A joint business and technical plan that lays out the details for the quick and effective resumption of work following a man-made or natural disaster;
- **Joint Access Management (Provider & Patient)**: Joint process, policies and technologies to ensure proper user identity and access (provider and patients);
- **Data Migration**: Process/procedures to select, prepare, extract, transform, and transfer data from one system to another system, as it relates to the common EHR;

- **Joint Risk Management**: Assessment and management of joint cost/schedule/performance risks to capability delivery;
- **Schedule Integration**: Assessment and integration of Department-specific schedule activity;
- **Joint Trouble Ticket Management**: Process to track the detection, reporting, and resolution of issues associated with test and evaluation, deployment, and sustainment of the EHR;
- **Joint Functional Issue Resolution:** Process for the joint management of training, defect management, content and configuration changes, and enhancement routing to determine a single solution decision for necessary joint configurations, and for resolving issues associated with the test and evaluation, deployment and sustainment of the EHR;
- **Program Integration:** Integration program activities for oversight and strategic communication/legislative affairs engagement; understand and engage key audiences to create, strengthen, or preserve favorable conditions that advance interests, policies, and objectives; congressionally-mandated reporting; audit engagement; executive secretariat for relevant oversight and governance forums;
- **Business Operations, Human Resources, Support Contracts & Budget**: administrative support, human resources and staffing, contracts, budgets, and related formal agreements;
- **Joint Data Sets:** Process for management of joint validated data sets to include the development of deliberate techniques for jointly managing and taking full advantage of the enterprise asset;
- **Joint Enterprise Technical Data Management**: process to effectively (1) create, integrate, disseminate and manage data for enterprise applications, processes and entities requiring timely and accurate data delivery, (2) address the transmission of different data sets within processes and applications that rely on the consumption of these data sets to complete business processes or transactions, (3) provide for data management standardization and technical implementation of the data standards, and (4) adherence to records control policies;
- **Joint Testing & Evaluation**: Support of the EHR's joint Test & Evaluation processes to include managing risks throughout the acquisition process by providing timely and accurate information;
- **Joint Data Standards/Interoperability**: Processes and procedures to implement national health data standards for interoperability to ensure: (1) active engagement/representation of DoD/VA to help shape national and international health standards-setting organizations standards (e.g., data formats, messaging, exchange protocols, meaningful use, usability, privacy, security and safety); (2) adoption of and mapping to national and international health standards; (3) implementation support of the Office of the National Coordinator's Interoperability Roadmap and the Trusted Exchange Framework and Common Agreement effort;
- **Joint Health Information Exchange**: Process that allows health care professionals and patients to appropriately access and securely share a patient's medical information electronically, including execution through trusted exchange documentation or contractual actions; and
- **Joint Longitudinal Viewer (Formerly Joint Legacy Viewer)**: Clinical application that provides an integrated, read-only display of health data from the DoD, VA, and private sector partners in a common data viewer.

Appendix D: Health Data Interoperability (HDI) Metrics Details

Calendar Year (CY) 2019 Highlights: Between FY2019 Q1 (ending December 31, 2018) and FY2020 Q1 (ending December 31, 2019), year over year JLV) (DOD), Virtual Lifetime Electronic Record Health Information Exchange (VLER HIE) (VA) and Blue Button (BB) (DOD) usage increased significantly. During the same period, the percentage of DOD Clinical Data Repository/VA Health Data Repository (CHDR) update messages with allergy or pharmacy data that were successfully processed decreased significantly.

Notable Changes in CY2019 - Metric	Year over Year Change
Total Number of DOD Joint Longitudinal Viewer (JLV) User Logins [Metric A.4]	42.50% **increase** from FY2019 Q1 to FY2020 Q1
Total Number of DOD Joint Longitudinal Viewer (JLV) Records Viewed [Metric A.5]	43.28% **increase** from FY2019 Q1 to FY2020 Q1
Total number of VA eHealth Exchange HIE Transactions [Metric B.1]	74.53% **increase** from FY2019 Q1 to FY2020 Q1
Total number of DOD Blue Button (BB) Downloads [Metric C.1]	32.27% **increase** from FY2019 Q1 to FY2020 Q1
Total number of DOD Blue Button (BB) Views [Metric C.2]	404.38% **increase** from FY2019 Q1 to FY2020 Q1
DOD Clinical Data Repository/VA Health Data Repository (CHDR) Clinical Data Update Success Rate from VA to DOD [Metric A.8]	57.92% **decrease** from FY2019 Q1 to FY2020 Q1

DOD and VA use the below software applications and tools to support EHR data interoperability:

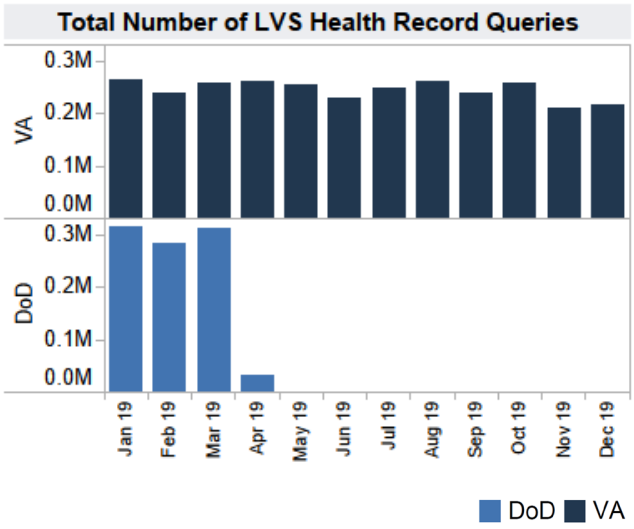
1. **Joint Longitudinal Viewer (JLV).** JLV, released in 2013, is a web-based graphical user interface that was jointly developed by DOD and VA to provide a near real-time, integrated and chronological view of EHR information. It allows clinicians to view an integrated, read-only display of patient data from the DOD, VA and Virtual Lifetime Electronic Record (VLER) eHealth Exchange civilian partners within a single application. JLV retrieves clinical data from several native data sources and systems, displayed in the graphic below.

2. **VLER HIE.** The VLER HIE is a secure network that shares Veteran and Military Health System beneficiary health care information electronically with civilian network

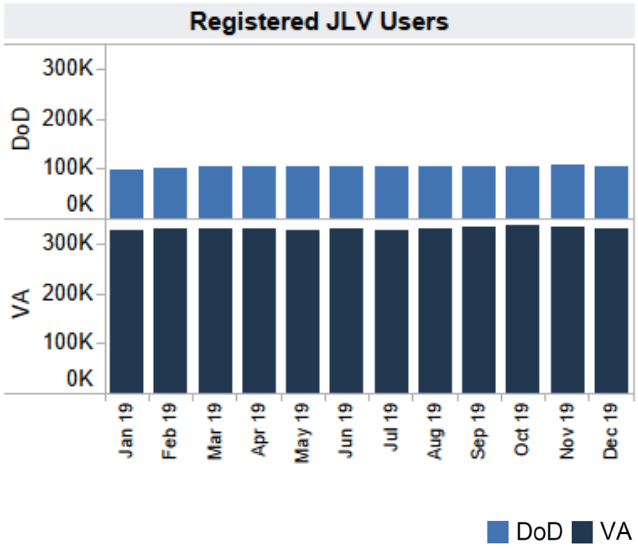
providers who join the eHealth Exchange. Community partners who join the eHealth Exchange undergo stringent security requirements to access patient records and health information securely, regardless if the facility is a civilian provider, military hospital or clinic or VA medical center (VAMC).

3. **DOD Clinical Data Repository/VA Health Data Repository (CHDR).** CHDR enables DOD and VA to exchange computable outpatient pharmacy and drug allergy information for shared patients. To achieve computable interoperability, each clinical component data is first standardized to a mutually agreed upon 'mediating vocabulary' that both systems comprehend, and provide decision support, such as drug-allergy or drug-drug interaction checks.

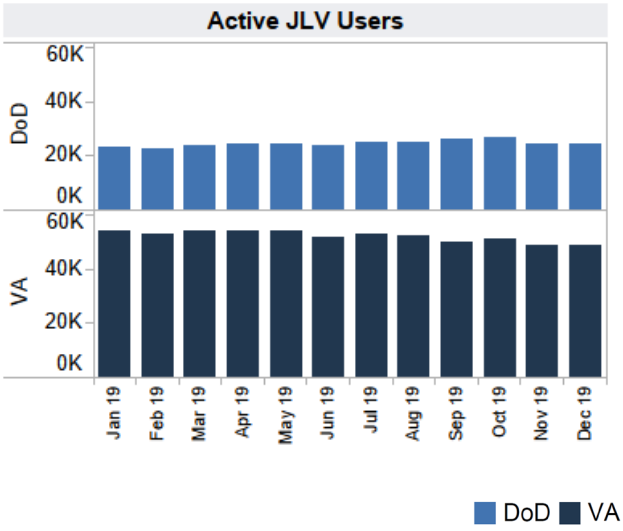
Category A: DOD/VA Integration
Value Statement: The FEHRM tracks utilization of legacy and modern EHRs, which enables departmental leadership and Congress to assess the reliability of legacy systems and evaluate the Departments' progress in transitioning from the less interoperable legacy systems (AHLTA, VistA) to the more interoperable modern EHR.



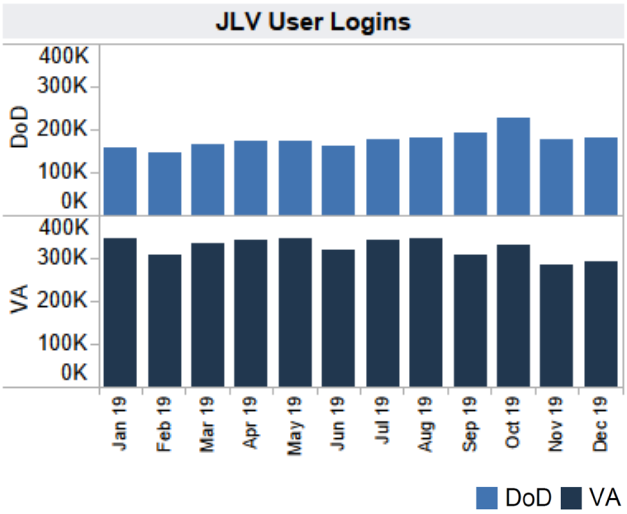
Metric A.1: Total Number of Health Record Queries		
Definition		
Total number of health record queries made by DOD and VA to the Federal Health Information Exchange/Bidirectional Health Information Exchange Framework database using VistA Web and Computerized Patient Record System Remote Data View in each month.		
DOD	**Change**	**Impact Factors**
■	DOD discontinued use of the LVS in April 2019, so there are no changes.	The DOD implemented the Agile Core Services/ Data Access Layer integration with Data Exchange Service in April 2019 and discontinued use of the LVS.
VA	**Change**	**Impact Factors**
▼	The total number of health record queries decreased by 9.50 percent between the first quarters of FY2019 and FY2020 to 685,939 queries.	There are no factors of note.



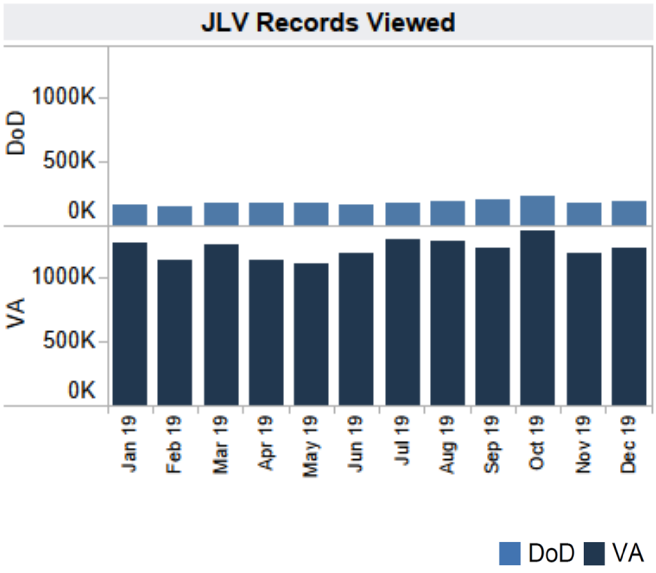
Metric A.2: Registered JLV Users		
Definition		
Number of unique users (active and inactive) who could log into the JLV at any time for DOD and VA.		
DOD	**Change**	**Impact Factors**
▲	The average monthly number of registered JLV users increased by 9.44 percent between the first quarters of FY2019 and FY2020 to 104,506.	There are no factors of note.
VA	**Change**	**Impact Factors**
▲	The average monthly number of registered JLV users increased slightly by 2.42 percent between the first quarters of FY2019 and FY2020 to 332,960.	There are no factors of note.



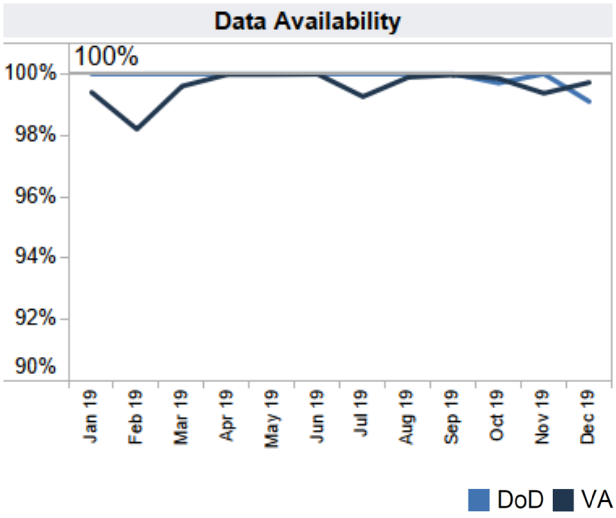
Metric A.3: Active JLV Users		
Definition		
Monthly total number of active unique users (i.e., a user who has logged on during a specific month) recorded by the JLV for DOD and VA.		
DOD	**Change**	**Impact Factors**
▲	The average monthly number of active JLV users increased by 14.10 percent between the first quarters of FY2019 and FY2020 to 25,309.	There are no factors of note.
VA	**Change**	**Impact Factors**
▼	The average monthly number of active JLV users decreased by 6.85 percent between the first quarters of FY2019 and FY2020 to 148,885.	There are no factors of note.



Metric A.4: JLV User Logins		
Definition		
Monthly total number of logins recorded by the JLV for DOD and VA.		
DOD	**Change**	**Impact Factors**
▲	The total quarterly number of JLV logins increased significantly by 42.50 percent between first quarters of FY2019 and FY2020 to 587,083.	• Release 7P1 of DES (a feeder system of JLV) was deployed at the end of January 2019.
VA	**Change**	**Impact Factors**
▼	The total quarterly number of JLV logins decreased by 5.95 percent between the first quarters of FY2019 and FY2020 to 910,238.	• Release 7P1 of DES (a feeder system of JLV) was deployed at the end of January 2019.



Metric A.5: JLV Records Viewed		
Definition		
Monthly total number of patient records viewed using the JLV for DOD and VA.		
DOD	**Change**	**Impact Factors**
▲	The total quarterly number of JLV records viewed increased significantly by 43.28 percent between the first quarters of FY2019 and FY2020 to 599,103.	• Release 7P1 of DES (a feeder system of JLV) was deployed at the end of January 2019.
VA	**Change**	**Impact Factors**
▲	The total quarterly number of JLV records viewed increased by 6.72 percent between the first quarters of FY2019 and FY2020 to 3,768,086.	• Release 7P1 of DES (a feeder system of JLV) was deployed at the end of January 2019. • The VHIE strategic communications program implemented a VHIE Rural Provider-focused Communications Campaign in FY2020 Q1, which increased JLV awareness and utility.



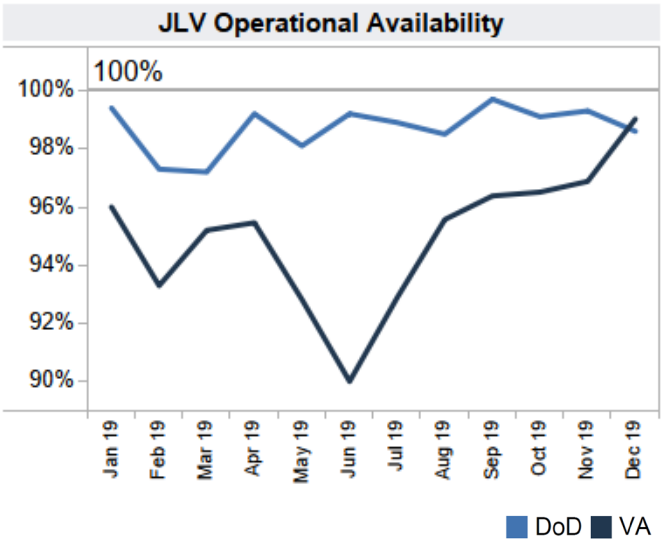
Metric A.6: Data Availability

Definition

DOD – Percentage of time the Data Exchange Service is available on the data server for all the sites located in the data centers in support of DOD to VA HIE.
VA – Percentage of time during the month that VistA Data Services (VDS) was operational (i.e., with no errors and available to both DOD and VA users) in all JLV environments (i.e., Earth Observation Cloud, Non-Secure Internet Protocol Router and Medical Community of Interest).

DOD	Change	Impact Factors
■	The average monthly data availability remained 99.60 percent between the first quarters of FY2019 and FY2020.	• In February 2019, DES was impacted from DAS Production certificates implementation as well as LVS-to-Master Veteran Index connectivity issues.

VA	Change	Impact Factors
▲	The average monthly data availability increased by 2.63 percent between the first quarters of FY2019 and FY2020 to 99.65 percent.	There are no factors of note.

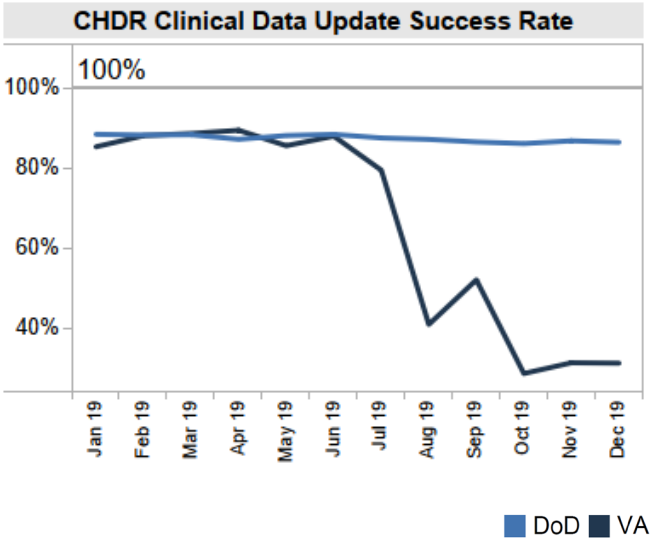


Metric A.7: JLV Operational Availability

Definition

The percentage of time during the month that the JLV was available for login and functionally operational by DOD and VA users (i.e., available for users to conduct a patient search and to access both DOD and VA EHR data in the cloud environment).

DOD	Change	Impact Factors
▲	The average monthly operational availability increased slightly by 0.30 percent between the first quarters of FY2019 and FY2020 to 99.00 percent.	• Release 7P1 of DES (a feeder system of JLV) was deployed at the end of January 2019.
VA	**Change**	**Impact Factors**
▼	The average monthly operational availability decreased slightly by 1.11 percent between the first quarters of FY2019 and FY2020 to 97.47 percent.	• In May and July 2019, JLV Operational Availability was negatively impacted by a combination of planned and unplanned outages of supplying data systems (e.g. Master Veteran Index, patient discovery web services) due to data migration challenges, hardware, and unspecified network issues. • In September 2019, a decrease in the number of planned and unplanned outages for various causes, including data migration challenges, hardware, and unspecified network issues positively affected JLV operational availability.



Metric A.8: CHDR Clinical Data Update Success Rate from DOD to VA and VA to DOD

Definition

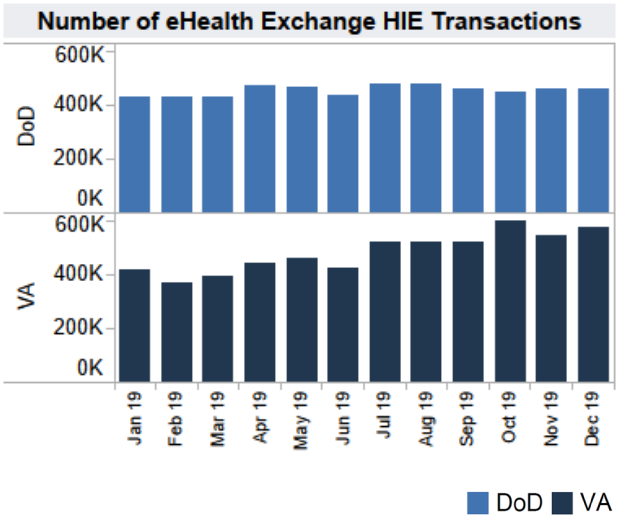
Percentage of CHDR clinical update messages with data (allergy or pharmacy) successfully processed. A successful process occurs when the sending agency receives a response from the receiving agency indicating successful receipt, translation and storage of clinical data.

DOD	Change	Impact Factors
▲	The average monthly CHDR clinical data update success rate had a slight increase of 0.30 percent from 86.15 percent to 86.45 percent between the first quarters of FY2019 and FY2020.	There are no factors of note.

VA	Change	Impact Factors
▼	The average monthly CHDR clinical data update success rate had a significant decrease of 57.92 percent from 88.50 percent to 30.58 percent between the first quarters of FY2019 and FY2020.	• VA identified three distinct issues that affected message processing by DOD systems of VA messages: 1) terminology mediation issues for allergy and pharmacy data, which constituted a significant proportion of the issues; 2) patient identification recognition; and 3) internal system communication issues. • VA identified and resolved issues with HealthConnect/VistA Interface Engine (VIE) cutover, as well as DOD interface engine that affected message processing.

Category B: Community Partnerships

Value Statement: The FEHRM monitors the Departments' progress toward consistent, secure and reliable health data exchange by tracking eHealth Exchange partner onboarding, as well as HIE transactions between the Departments and private care partners, over time as best practices and improvements are implemented.

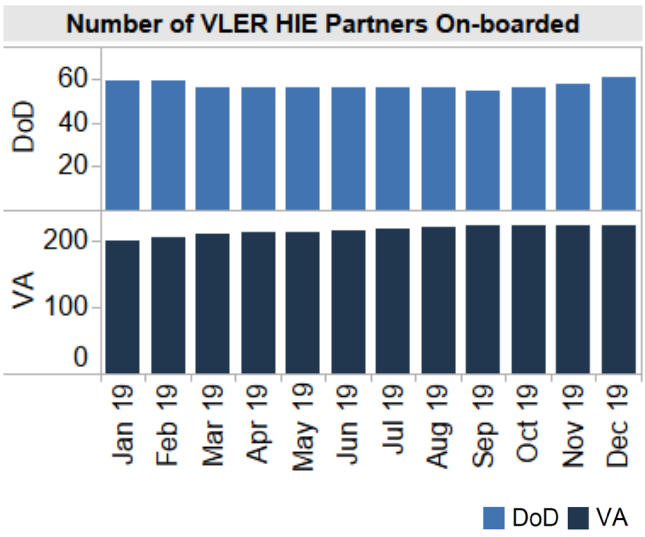


Metric B.1: Number of eHealth Exchange HIE Transactions

Definition

Monthly count of Consolidated Clinical Document Architecture, C32 or C62 (document architecture that facilitates interoperability of health data between EHR systems) documents exchanged between the Departments and private partners.

DOD	Change	Impact Factors
▼	The total number of HIE transactions decreased slightly by 0.59 percent between the first quarters of FY2019 and FY2020 to 1,363,458.	There are no factors of note.
VA	**Change**	**Impact Factors**
▲	The total number of HIE transactions increased significantly by 74.53 percent between the first quarters of FY2019 and FY2020 to 1,709,341.	• VA attributed the expected upward trend in HIE transactions to the increase in private partners and utilization of the HIE system.



Metric B.2: Number of VLER HIE Partners Onboarded

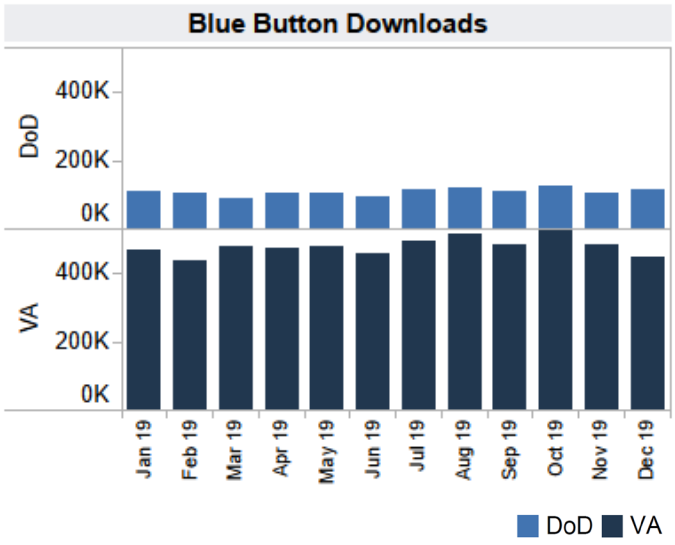
Definition

Monthly and cumulative count of private care providers who are partners in the HIE program with DOD and/or VA. A private care provider is counted as one partner if the provider has one or more data sharing agreement(s) with DOD and/or VA.

DOD	Change	Impact Factors
▲	Four additional VLER HIE partners were onboarded between the first quarters of FY2019 and FY2020, bringing the total to 61.	There are no factors of note.
VA	Change	Impact Factors
▲	37 additional VLER HIE partners were onboarded between the first quarters of FY2019 and FY2020, bringing the total to 223.	There are no factors of note.

Category C: Patient Engagement

Value Statement: Blue Button has served as the foundation for broader patient engagement activities within the Departments, enabling patients to have easy access to their own health information in a usable format. The FEHRM monitors several metrics associated with Blue Button that show patient engagement with their integrated and consolidated health records from DOD and VA legacy systems' patient portals over time.

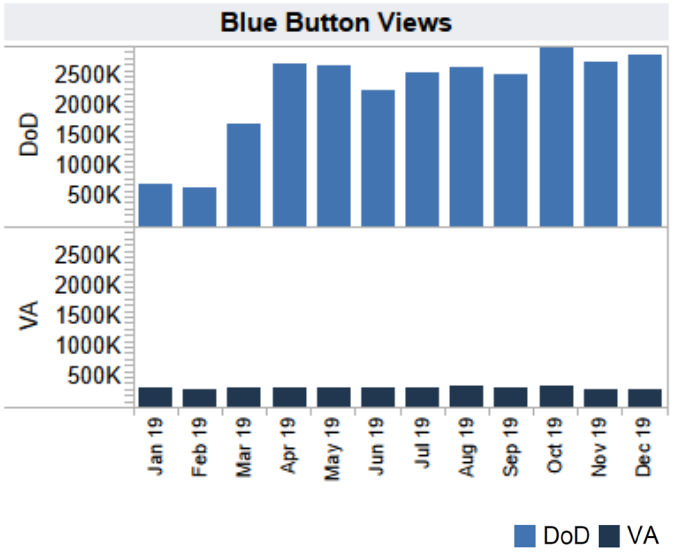


Metric C.1: Blue Button Downloads

Definition

Total number of data downloads (e.g., PDF, text) generated by end users per month.

DOD	Change	Impact Factors
▲	The total quarterly number of Blue Button downloads increased significantly by 32.27 percent between the first quarters of FY2019 and FY2020 to 339,387.	There are no factors of note.
VA	**Change**	**Impact Factors**
▲	The total quarterly number of Blue Button downloads increased by 13.66 percent between the first quarters of FY2019 and FY2020 to 1,457,123.	There are no factors of note.

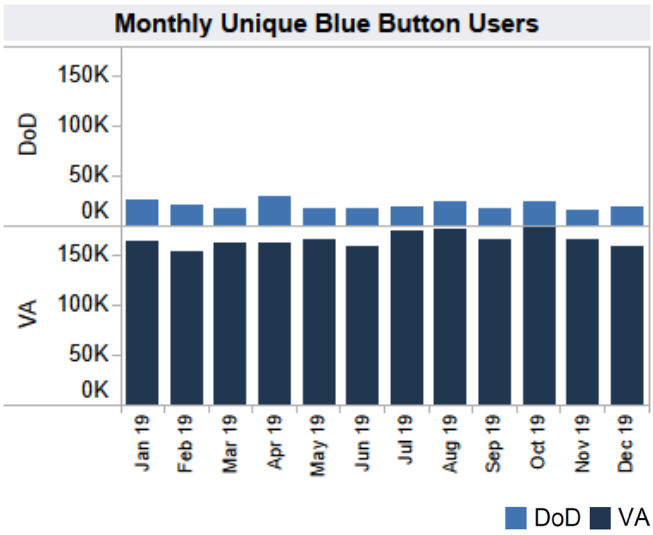


Metric C.2: Blue Button Views

Definition

Total number of views generated by end users per month.

DOD	Change	Impact Factors
▲	The total quarterly number of Blue Button views increased significantly by 404.38 percent between the first quarters of FY2019 and FY2020 to 8,763,550.	• DOD restoration of the Blue Button in-browser dashboard view in FY2019 Q2 in response to user requests resulted in continued higher view counts.
VA	**Change**	**Impact Factors**
▲	The total quarterly number of Blue Button views increased by 6.62 percent between the first quarters of FY2019 and FY2020 to 942,380.	There are no factors of note.



Metric C.3: Monthly Unique Blue Button Users		
Definition		
Number of unique Blue Button users within a month.		
DOD	**Change**	**Impact Factors**
▼	The average monthly number of Blue Button unique users decreased by 2.93 percent between the first quarters of FY2019 and FY2020 to 19,765.	There are no factors of note.
VA	**Change**	**Impact Factors**
▲	The average monthly number of Blue Button unique users increased by 15.03 percent between the first quarters of FY2019 and FY2020 to 169,528.	There are no factors of note.