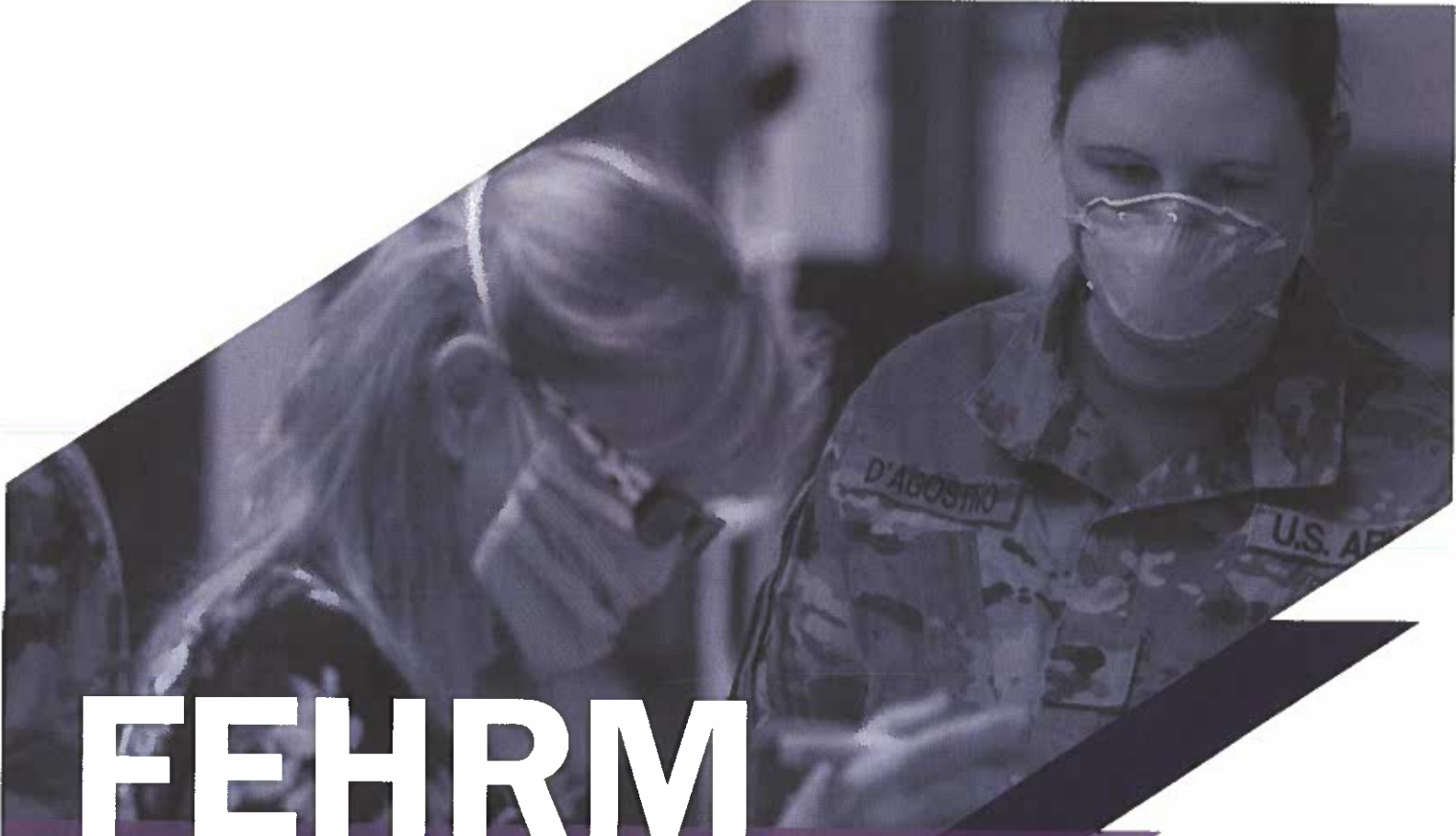




**FEDERAL ELECTRONIC
HEALTH RECORD
MODERNIZATION**



FEHRM

Interoperability Progress Quarterly Report

FOURTH QUARTER, FISCAL YEAR 2020

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

Interoperability Metrics

Pursuant to the National Defense Authorization Act for Fiscal Year 2020 (NDAA FY2020), the Federal Electronic Health Record Modernization (FEHRM) program office will establish a Joint Interoperability Strategy with the Department of Defense (DOD) and Department of Veterans Affairs (VA). As part of this process, the FEHRM will evaluate metrics appropriate for assessing and monitoring progress toward achieving the outlined strategy.

A snapshot of the current baseline Health Data Interoperability (HDI) metrics used to track progress toward modernization and enhancement of HDI is included below. **Appendix A** includes details outlining each metric category: (A) DOD/VA Integration, (B) Community Partnerships and (C) Patient Engagement.

Electronic Health Record Modernization

- **FEHRM Program Office:** During the fourth quarter of FY2020 (Q4), the FEHRM welcomed a new, permanent leadership team to continue the organizational momentum established by Interim Director Neil Evans, M.D., and Interim Deputy Director Holly Joers, M.S., MBA. Mr. Bill Tinston assumed responsibilities as Director, and Mr. Ed Reyelts assumed responsibilities as Deputy Director.
- **Joint Configuration Management:** The Chief Medical Informatics Officer (CMIO) created the Joint Sustainment and Adoption Board (JSaAB) in the second quarter of FY2020 (Q2). This joint governance body is responsible for approval of all joint Electronic Health Record (EHR) content and configuration changes. The JSaAB directly informs the Joint Change Control Board and is essential to operating the single, common federal EHR, providing DOD and VA insight into all configuration decisions impacting the production baseline. The first meeting of the JSaAB was held April 1, 2020, and the charter was signed July 17, 2020. The JSaAB is operational and currently approving content and configuration changes.

In FY2020 Q4, the JSaAB approved 249 weekly items and 11 daily go-live items that surfaced during the Centralized Scheduling Solution (CSS) deployment to the VA Central Ohio Healthcare System, the Department of Homeland Security's U.S. Coast Guard (USCG) Initial Operational Capability and DOD Wave NELLIS. Further, the FEHRM CMIO established, finalized and rehearsed an e-JSaAB process for urgent and emergent issue resolution during off-hours to simulate real-world scenarios. The team continues to collect lessons learned and improve processes.

One of the key benefits of a unified EHR is increased convenience and transparency for the beneficiary. In FY2020 Q4, in conjunction with multi-disciplinary DOD and VA teams, the Patient-Initiated Release of Information (ROI) effort was initiated in direct response to

Congressional interest in developing a single pathway for requesting and delivering health records from DOD and VA sources. As this project moves into the execution phase, policy review and updates to the joint medical record are expected by end of FY2021 Q2.

Data management is a critical component to the overall management of the joint health record. To better this process, the CMIO established a working group to jointly review codesets (i.e., interchangeable lists of data used throughout the medical record). This working group will serve as the prototype for additional working groups designed to jointly manage content and configuration moving forward. In FY2020 Q4, this working group updated several codesets including the list of medical specialties used in the record. This change revealed the interconnected nature of the system as it touched on diverse groups from billing, referrals, coding, reports, nursing and clinicians all matrixed across DOD, VA and USCG. This solutions-based approach allows flexibility to bring in the right stakeholders and achieve consensus on the way forward.

During the reporting period, the FEHRM CMIO terminology team embraced four key projects, all relating to high-volume, high-value data generated in the federal EHR, including laboratory, nursing inpatient documentation, immunizations and problem/diagnosis lists. This activity experiences success in advancing standardized business rules for applying terminologies in all of these areas. The FEHRM CMIO terminology team works with DOD and VA terminology teams to launch a Federated Interagency Terminology Service under FEHRM sponsorship, providing a unified approach to terminologies across the agencies moving forward.

- **Joint Enclave Management:** The FEHRM's Technical Director hosted several Environment Management Operations Center (EMOC) activities in partnership with DOD and VA program offices and their prime vendors. Sessions included Current and Future Dental Solutions, Telehealth, Defense in Depth and Joint Security Architecture and Continuity of Operations and Disaster Recovery. In addition, EMOC partners facilitated a deployment walkthrough session to prepare all parties for the intense schedule of Go-Live activities starting at the end of the quarter through FY2021.

As a result of the ongoing functional-technical collaboration, the EMOC also held hybrid discussions on joint sites and the kickoff approach to ROI. To that end, the technical subject matter experts were able to collaborate and request further examination of preliminary courses of action and associated critical milestones. This effort serves as a driving force for the FEHRM and Departments to get to an integrated plan for the single, common federal EHR and work through technical issues as they deliver capability.

- **Joint/Sharing Sites Implementation:** During FY2020 Q4, the FEHRM engaged in numerous planning, execution and analysis activities to support the unique health informatics needs at joint DOD and VA sharing sites. Leveraging the insights gained from its earlier Data Collection Workbook (DCW) pilot at three sharing site locations, the

FEHRM collaborated with its Defense Health Agency and Veterans Health Administration health informatics colleagues to assess the degree of clinical shared services at 56 VA and 83 DOD facilities. The information gained during this expanded DCW analysis will enable the FEHRM to gain a more accurate understanding of the nature of current sharing arrangements and patient encounter touchpoints, and to use this information to assess the risks and benefits of synchronous and asynchronous deployments at these sharing sites.

The FEHRM also organized and led a multi-stakeholder engagement at the James A. Lovell Federal Health Care Center (FHCC). The clinical and technical insights gained during this site engagement will enable the FEHRM and program management offices (PMOs) to develop different courses of action for a synchronous EHR deployment at FHCC, to include the “what, how and when” of the deployment for both DOD and VA users, to develop a plan to identify the risks and create mitigation plans in the case of an asynchronous deployment and to increase awareness among FHCC staff and leadership about the new EHR.

Further, the FEHRM actively worked with its interagency partners to mitigate risks associated with the asynchronous DOD and VA deployment in Alaska. The FEHRM helped to successfully test VA users’ ability to access MHS GENESIS using a VA computer on a VA network with a Personal Identity Verification card, obtained approval from the DOD Healthcare Management System Modernization PMO to build a Patient Care Location to support Laboratory and Radiology orders by VA providers and worked with Department PMOs to identify and include VA users in the local DOD User Role Assignment list for training and provisioning.

Finally, in collaboration with Department PMOs, the FEHRM supported the execution of a Technical Direction Letter to accelerate deployment, technical and functional planning for the implementation of Cerner at joint sharing sites.

- **Deployment:** The FEHRM drives federal capabilities to enhance health care by leading value-added activities for DOD, VA and USCG EHR deployments. These activities include managing common capabilities, such as the EHR baseline, the Federal Enclave, monitoring activities, software releases and upgrades and cybersecurity.

Despite the significant operational impacts of COVID-19, the FEHRM delivered value-added capabilities integral to federal EHR modernization. The FEHRM worked closely with the Departments’ functional, technical and site leadership to mitigate challenges and establish prioritized activities to advance solutions, capability delivery and joint initiatives supporting DOD, VA and USCG operational requirements.

During FY2020 Q4, the FEHRM supported the successful delivery of the single, common federal EHR to multiple locations. The FEHRM supported the USCG’s EHR deployment to four pilot sites (August 29, 2020) and the DOD’s Wave NELLIS EHR deployment to 10

military treatment facility commands (September 26, 2020). In addition, the FEHRM supported the VA's CSS deployment to the VA Central Ohio Healthcare System (August 21, 2020).

In FY2021 Q1, the FEHRM is scheduled to support the following events:

- Integration of the CommonWell Health Alliance into the joint health information exchange (HIE) on October 9, 2020
- VA Go-Live at Mann-Grandstaff VA Medical Center on October 24, 2020
- DOD Go-Live of Wave PENDLETON on October 31, 2020

Joint HIE

- **Joint HIE Enhancements:** The FEHRM supported planning for three enhancements to the joint HIE, including enhancing patient matching double checks to accurately match patient data exchanged, a pre-fetch toggle to turn functionality on or off for individual partners and the option to bypass the joint HIE cache to send new patient discoveries and documents queried and received to all external partners. Production planned for all enhancement in October 2020.
- **Joint HIE/Joint Longitudinal Viewer (JLV) Collaboration:** The FEHRM initiated the joint HIE/JLV Bi-Weekly Collaboration Meeting, which enables DOD and VA senior leaders to review joint HIE and JLV progress, discuss risks and identify future opportunities. The meeting also provides a forum to discuss cross-Departmental efforts to resolve issues and supports preparation for the monthly DOD and VA EHR Modernization Coordination Meeting as well as updates and responses to Congressional inquiries.
- **CommonWell:** Planning is underway for the FEHRM to connect the joint HIE with the CommonWell Health Alliance in October 2020. CommonWell will bring a nationwide network of 15,000-plus hospitals and clinics to the 46,000 community partners already part of the joint HIE. The CommonWell connection will allow providers in the DOD, VA and USCG to access information on their patients' prescriptions, allergies, illnesses, lab and radiology results, immunizations, past medical procedures and medical notes to make the best care decisions. The joint HIE and CommonWell connection are part of the FEHRM's overarching effort to deliver capabilities that enable the DOD, VA and USCG to deploy a single, common federal EHR.

Interoperability Modernization Strategy

- **Interoperability Modernization Strategy (Phase 1):** The DOD and VA Interoperability Modernization Strategy was submitted into formal coordination and comments received were adjudicated with the Interoperability Modernization Advisory Group. The FEHRM

Interoperability Modernization team monitored the document's progress through final signature by the DOD and VA Deputy Secretaries.

- **Interoperability Modernization Strategy Supporting Plan (Phase 2):** Following concurrence from the Advisory Group on the Phase 2 approach, the Integrated Product Team (IPT) reviewed an initial mapping of existing DOD/VA and departmental initiatives aligned to the strategy goals and objectives to qualify initiatives and identify gaps. The IPT met throughout September to review and refine the initiatives mapping, focusing on those initiatives with the most significant impact.
- **Interoperability Modernization Strategy Performance Measures (Phase 3):** With input from FEHRM leadership, the Interoperability Modernization team determined that following the completion of the supporting plan, which focuses on existing initiatives and their performance measures, an additional Phase 3 is required. Phase 3 will identify performance measures and metrics (i.e., key performance indicators, or KPIs) that track progress against the Interoperability Modernization Strategy goals and objectives and demonstrate how the initiatives in the supporting plan and other work across the DOD and VA improve interoperability to benefit beneficiaries and health and benefits teams.

Interoperability Standards

- **ONC Engagements:** During FY2020 Q4, the FEHRM collaborated with stakeholders to further the progress of interoperability standards. The FEHRM participated in numerous Office of the National Coordinator for Health Information Technology (ONC) meetings, webinars and public comment periods to inform their work in support of the 21st Century Cures Act Trusted Exchange Framework and Common Agreement provisions outlined in Section 4003 of the law.

In addition, the FEHRM participated in Health Level Seven (HL7) working groups and balloting sessions; Federal Health IT Advisory Committee meetings; the Federal Health IT Coordinating Council; U.S. Core Data for Interoperability (USCDI) and Fast Healthcare Interoperability Resources (FHIR) working groups; the Trusted Exchange Framework and Common Agreement Federal Workgroup; and Federal Patient Identity and Patient Matching efforts.

Further, on September 2, 2020, the FEHRM Director met with Dr. Don Rucker of the ONC to discuss ONC Health Interoperability initiatives and challenges, and determine ways for the ONC and FEHRM to collaborate. The FEHRM also hosted quarterly interoperability coordination meetings to exchange FEHRM Interoperability Workstream and ONC current engagements and identify collaboration opportunities.

During the reporting period, the FEHRM participated in the following activities to further interoperability standards:



- The ONC Standards Measurement Workshop, the Information Blocking Webinar; Modernization Strategy and Metrics Engagement Workshop; and Social Determinants of Health, Clinical Decision Support and FHIR Scale Taskforce Workshops.
- ONC-hosted federal agency sessions to discuss and highlight patient identity and patient matching activities at national and international levels. Congress directed ONC to develop a report on current initiatives used to improve patient identification by the end of 2020.
- The HL7 Gravity Project Community meetings to review submission of Social Determinants of Health USCDI data elements recommended for inclusion in USCDI, Version 2.
- The team reviewed and coordinated the comments from the FEHRM, DOD and VA on national policies (i.e. EHR Reporting Program, USCDI and Federal Health IT Strategic Plan 2020–2025).

Looking ahead to FY2021 Q1, the FEHRM Director will brief the Federal Health IT Coordinating Council during an ONC-hosted meeting with federal stakeholders on October 28, 2020. Further, the upcoming quarter will see the FEHRM review, coordinate and adjudicate comments from DOD and VA on the ONC Interoperability Standards Advisory and the inaugural Standards Version Advancement Process on November 9, 2020. Lastly, the FEHRM will host the DoD/VA Industry Interoperability Roundtable on November 18, 2020.

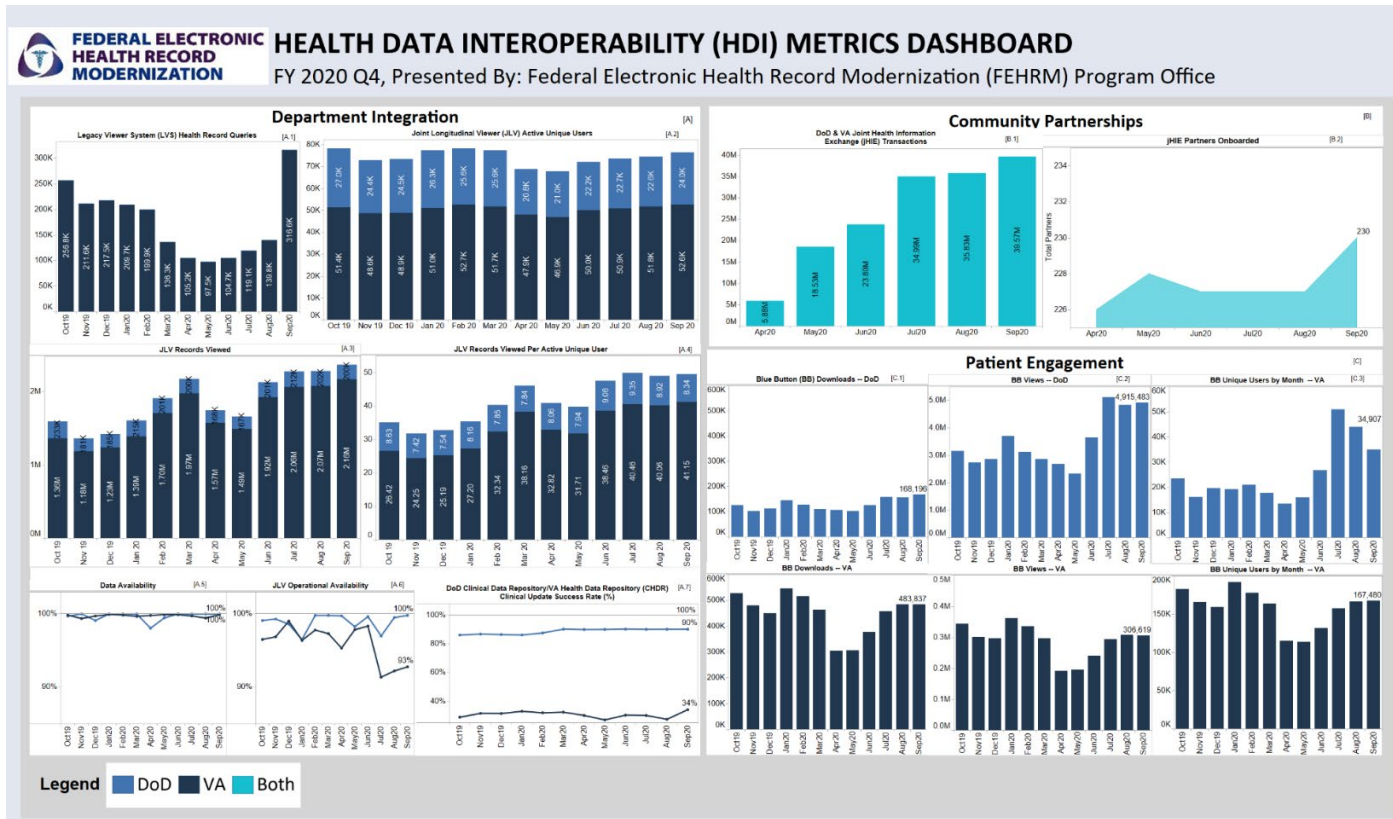
Conclusion

The Departments remain focused on enhancing and measuring HDI with the single, common EHR as well as with those of their private sector partners who treat DOD and VA beneficiaries. Enabling HIE in the DOD, VA, USCG and private sector will serve as the foundation for a patient-centric health care experience, seamless care transitions and improved care for beneficiaries. To demonstrate the effect on patients and providers as DOD, VA and USCG move forward with their implementation of a seamless EHR system, the FEHRM will continue to monitor and report data sharing among the Departments as part of its broader support of the Departments' commitment to advance HDI through interoperability modernization strategic planning efforts.

Appendix A: HDI Metrics Details

HDI Metrics Details: Throughout FY2020 Q4, the FEHRM, DOD and VA collaborated to monitor baseline HDI metrics and the progress toward modernization and enhancement of HDI by both Departments. Each section shows a different interoperability dimension, as derived from the HDI Measurement Framework: (A) Department Integration, (B) Community Partnerships and (C) Patient Engagement. Figure 1 represents a snapshot of the FY2020 Q4 HDI Metrics Dashboard. Detailed explanations of the metric trends follow Figure 1. A small snapshot of each individual metric is detailed, noting the change between quarters and any changes to systems that could result in potential impacts (for example, infrastructure outages or patches as well as new capabilities such as the joint HIE).

Figure 1 – FY2020 Q4 HDI Metrics Dashboard



Q4 Highlights: As seen in Table 1, between FY2020 Q3 and Q4, quarter over quarter Legacy Viewer Systems, or LVS (VA), JLV (VA) and Blue Button (DOD/VA) usage increased substantially.

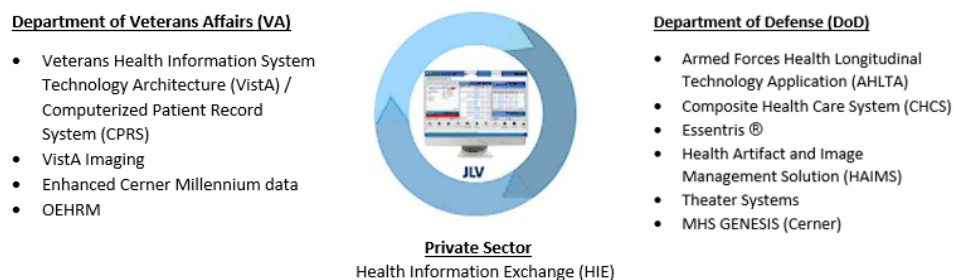
Table 1 – Quarter Highlights

Metrics with a Notable Change in FY2020 Q4	Quarterly Delta	Supporting Information
VA LVS Health Record Queries [Metric A.1]	87.30% increase from a total of 307,300 in FY2020 Q3	The increase in the number of VA LVS Health Record Queries is attributed to an increase in the number of Outpatient Prescription (3.6x increase) and Vitals (2.2x increase) Queries between August and September 2020.
VA JLV Records Viewed [Metric A.3]	26.31% increase from a total of 4,984,422 in FY2020 Q3	The increase in the number of VA JLV Records Viewed is attributed to a recovery from the decrease in the amount of VA Admissions and Outpatient Visits during FY2020 Q3 due to COVID-19, which correlated to a reduced need for viewing patient records. The number of VA JLV Records Viewed per Active Unique VA JLV User has continued to rise as JLV users recognize the increased value of JLV and, therefore, engage more frequently. JLV added high-value end-user enhancements, including new widgets, increased performance now that JLV is available with the Chrome browser (widgets load two to three times faster) and more convenient use with Single Sign On.
Joint HIE Transactions [Metric B.1]	128.98% increase from a total of 48,213,681 in FY2020 Q3	The baseline number of average monthly joint HIE Transactions between the Departments and private partners from its launch in April 2020 through the end of FY2020 Q3 was 16.07 million. In FY2020 Q4, a monthly average of 36.80 million joint HIE Transactions were exchanged.
VA Blue Button Views [Metric C.2]	44.65% increase from a total of 627,515 in FY2020 Q3	The increase in the number of users engaging with Patient Portal Blue Button in FY2020 Q4 is attributed to COVID-19 Lab Test availability.
DOD Blue Button Views [Metric C.2]	71.49% increase from a total of 8,657,926 in FY2020 Q3	
VA Active Unique Blue Button Users [Metric C.3]	36.42% increase from a monthly average of 120,066 in FY2020 Q3	
DOD Active Unique Blue Button Users [Metric C.3]	130.20% increase from a monthly average of 18,811 in FY2020 Q3	

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

1. **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 Figure 2.

Figure 2 – JLV Data Sources and Systems



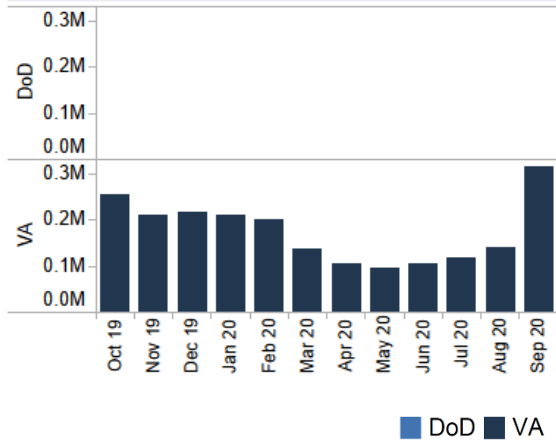
2. **Joint HIE.** The Joint HIE is a secure network that shares Veteran and Military Health System beneficiary health care information electronically with civilian network providers who join the eHealth Exchange. Community partners who join undergo stringent security requirements to access patient records and health information securely, regardless if the facility is a civilian provider, military hospital or clinic or VA Medical Center.
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.
4. **Blue Button.** Blue Button enables patients from the DOD and VA to access their personal health data from their EHR, including allergies, laboratory and radiology results, vital signs, and outpatient medications, problem lists and encounters.

Data Sharing Statistics and Updates: The FEHRM, DOD and VA continue to expand HDI by improving upon the more than 2.3 million patient records currently shared monthly between the two Departments, as defined by the monthly total number of JLV Records viewed by the Departments reported as of September 30, 2020.

Category A: Department 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 (e.g., Armed Forces Health Longitudinal Technology Application (AHLTA) and Veterans Health Information Systems and Technology Architecture (VistA) to the more interoperable modern EHR).



Legacy Viewer System (LVS) Health Record Queries



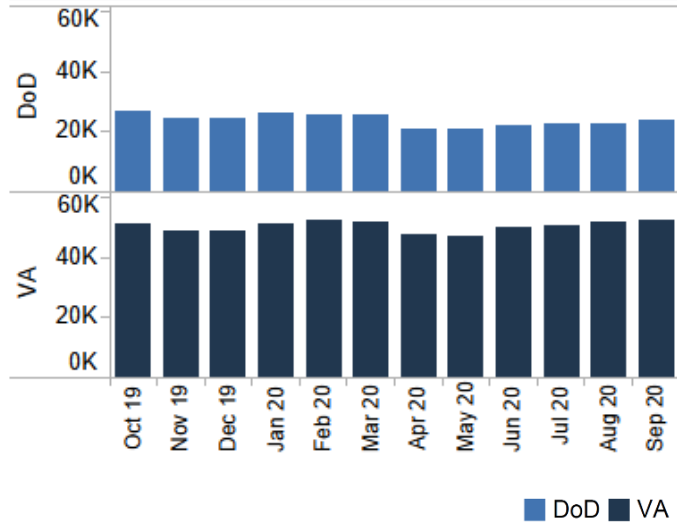
Metric A.1: Legacy Viewer System (LVS) Health Record Queries

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 the 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 increased substantially by 87.30 percent between Q3 and Q4 to 575,574 queries.	The increase in the number of VA LVS Health Record Queries is attributed to an increase in the number of Outpatient Prescription (3.6x increase) and Vitals (2.2x increase) Queries between August and September 2020.

Joint Longitudinal Viewer (JLV) Active Unique Users

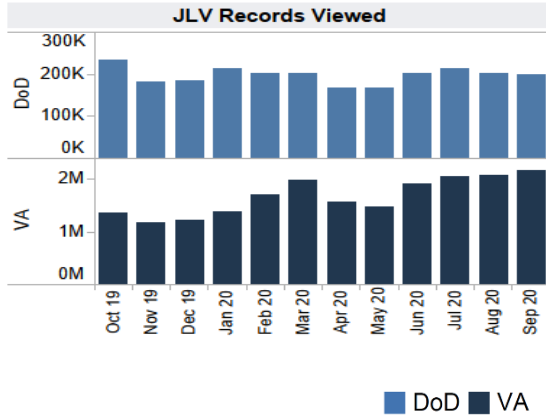


Metric A.2: JLV Active Unique Users

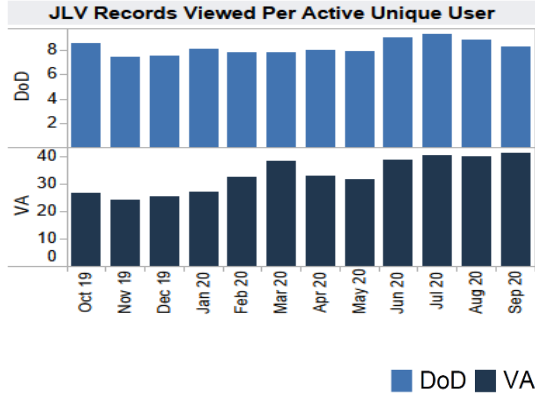
Definition

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

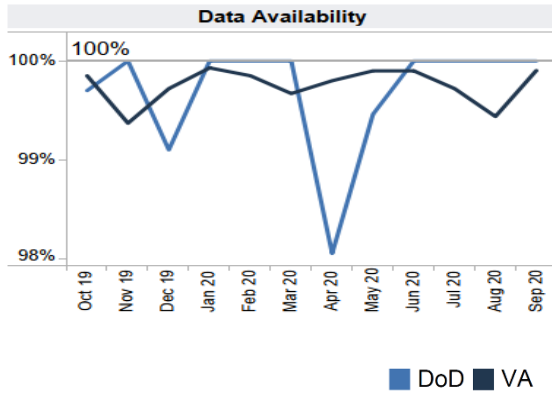
DOD	Change	Impact Factors
▲	The average monthly number of active JLV users increased by 8.41% between Q3 and Q4 to 23,114.	There are no factors of note.
VA	Change	Impact Factors
▲	The average monthly number of active JLV users increased by 7.15% between Q3 and Q4 to 51,741.	There are no factors of note.



Metric A.3: 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 by 14.81% between Q3 and Q4 to 614,544.	There are no factors of note.
VA	Change	Impact Factors
	The total quarterly number of JLV records viewed increased by 26.31% between Q3 and Q4 to 6,295,937.	The increase in the number of VA JLV Records Viewed is attributed to a recovery from the decrease in the amount of VA Admissions and Outpatient Visits during FY2020 Q3 due to COVID-19, which correlated to a reduced need for viewing patient records.



Metric A.4: JLV Records Viewed Per Active Unique User		
Definition		
Monthly number of patient records viewed using the JLV for DOD and VA per active unique user		
DOD	Change	Impact Factors
▲	The average monthly number of JLV records viewed per active unique user increased by 6.20% between Q3 and Q4 to 8.87%.	There are no factors of note.
VA	Change	Impact Factors
▲	The average monthly number of JLV records viewed per active unique user increased by 18.14% between Q3 and Q4 to 40.56%.	JLV users are engaging more frequently as they recognize the increased value of JLV. JLV added high-value end-user enhancements including new widgets, increased performance now that JLV is available with the Chrome browser (widgets load two to three times faster) and more convenient use with Single Sign On.



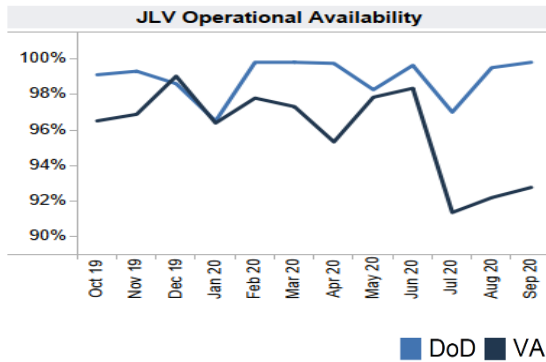
Metric A.5: Data Availability

Definition

DOD – The 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 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 increased slightly by 0.83% between Q3 and Q4 to 100%.	There are no factors of note.
VA	Change	Impact Factors
▼	The average monthly data availability decreased slightly by 0.18% between Q3 and Q4 to 99.69%.	There are no factors of note.



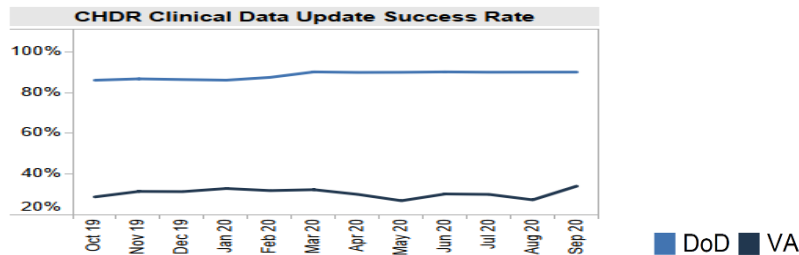
Metric A.6: JLV Operational Availability		
Definition		
The percentage of time during the month that the JLV was available for log in and functionally operational by DOD and VA users (i.e., available for users to conduct a patient search and to access both DOD and VA EHR data in the cloud environment)		
DOD	Change	Impact Factors
▼	The average monthly operational availability decreased slightly by 0.44% between Q3 and Q4 to 98.77%.	There are no factors of note.
VA	Change	Impact Factors
▼	The average monthly operational availability decreased by 5.06% between Q3 and Q4 to 92.11%.	There was an increase in downtime due to a caching issue with the EHR vendor that required the cache to be cleared; and then caching halted, resulting in all queries being pulled in real time instead of using cached patient data.

Metric A.7: CHDR Clinical Data Update Success Rate from DOD to VA and VA to DOD

Definition

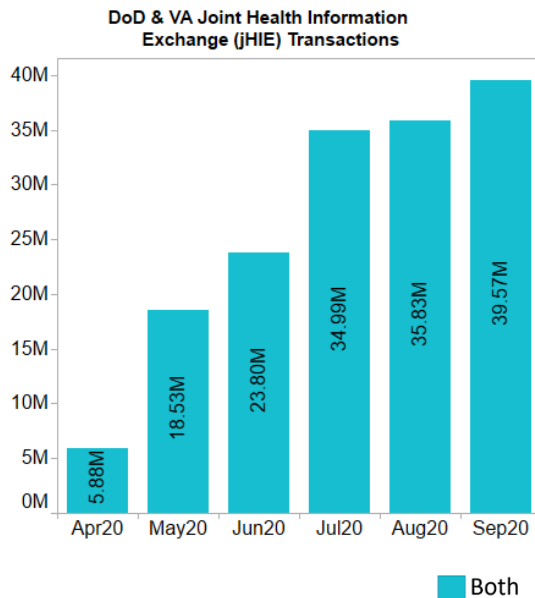
Percentage of CHDR clinical update messages with data (allergy or pharmacy) successfully processed (A successful process occurs when the sending agency receives a response from the receiving agency indicating successful receipt, translation and storage of clinical data.)

DOD	Change	Impact Factors
▲	The average monthly CHDR clinical data update success rate had a slight increase of 0.03% from 90.05% in Q3 to 90.08% in Q4.	<ul style="list-style-type: none"> There are no factors of note.
VA	Change	Impact Factors
▲	The average monthly CHDR clinical data update success rate had an increase of 1.41 percent from 29.08% in Q3 to 30.49% in Q4.	<ul style="list-style-type: none"> The VA identified three distinct issues that affected message processing by DOD systems of VA messages: terminology mediation issues for allergy and pharmacy data, patient identification recognition and internal system communication issues. The DOD CHDR team performed additional analysis and has indicated changes in the July 2019 release affected how the DOD CHDR application acknowledged reception of VA messages; the correction to this issue is planned for a later patch update due to higher priority security patch updates. The DOD CHDR team has also verified that the messages being received from VA are being processed and stored in the VA Clinical Data Repository, and therefore, no patient safety concerns exist. The next DOD CHDR release is scheduled for November 4, 2020, which will contain improvements to DOD responses.



Category B: Community Partnerships

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

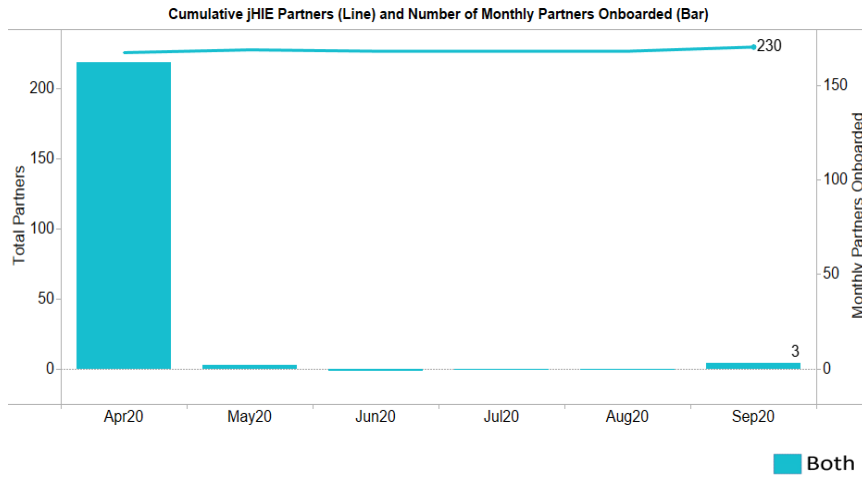


Metric B.1: Joint HIE Transactions

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/VA	Change	Impact Factors
	The total number of joint HIE transactions increased substantially by 128.98% between Q3 and Q4 to 110,398,062.	DOD, VA and the FEHRM opened access to the joint HIE in mid-April 2020. Providers from the Departments and private sector treating their patients are now be able to use the Joint HIE to request access to health records of shared patients.



Metric B.2: Joint HIE Partners Onboarded

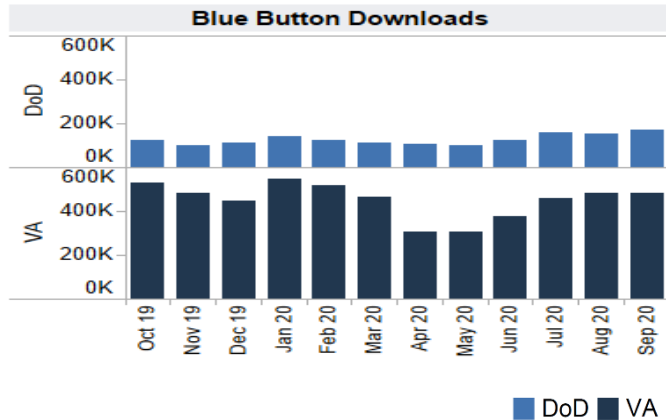
Definition

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

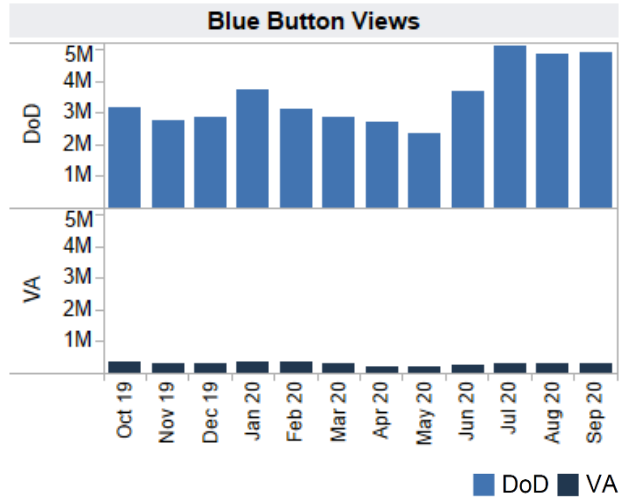
DOD/VA	Change	Impact Factors
▲	Three additional Joint HIE partners were onboarded between Q3 and Q4, bringing the total to 230.	There are no factors of note.

Category C: Patient Engagement

Value Statement: Blue Button served as the foundation for broader patient engagement activities within the Departments, enabling patients to easy access to their 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 by 44.56 percent between the third and fourth quarters to 480,245.	The increase in Patient Portal Blue Button usage is attributed to COVID-19 Lab Test availability.
VA	Change	Impact Factors
▲	The total quarterly number of Blue Button downloads increased by 44.51 percent between the third and fourth quarters to 1,425,046.	The increase in Patient Portal Blue Button usage is attributed to COVID-19 Lab Test availability.

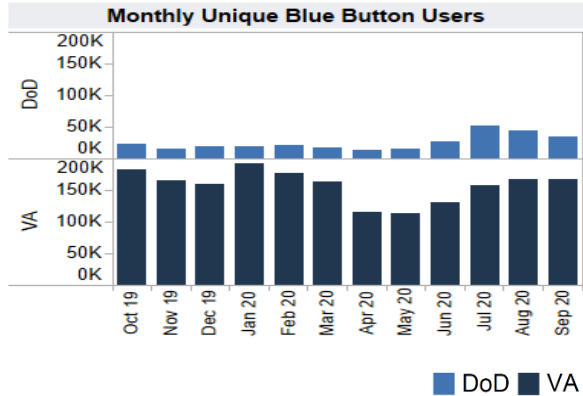


Metric C.2: Blue Button Views

Definition

Total number of views generated by end users per month

DOD	Change	Impact Factors
▲	The total quarterly number of Blue Button views increased substantially by 71.49% between Q3 and Q4 to 14,847,703.	The increase in Patient Portal Blue Button usage is attributed to COVID-19 Lab Test availability.
VA	Change	Impact Factors
▲	The total quarterly number of Blue Button views increased substantially by 44.65% between Q3 and Q4 to 907,685.	The increase in Patient Portal Blue Button usage is attributed to COVID-19 Lab Test availability.



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 increased substantially by 130.20% between the Q3 and Q4 to 43,302.	The increase in Patient Portal Blue Button usage is attributed to COVID-19 Lab Test availability.
VA	Change	Impact Factors
▲	The average monthly number of Blue Button unique users increased by 36.42% between Q3 and Q4 to 163,794.	The increase in Patient Portal Blue Button usage is attributed to COVID-19 Lab Test availability.