

STATEMENT BY

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DEFENSE HEALTHCARE MANAGEMENT SYSTEMS

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Chairman Cochran and Ranking Member Durbin, thank you for the opportunity to address the Subcommittee on Defense of the Senate Appropriations Committee. I am honored to represent DoD as the Secretary's program executive responsible for the Department's efforts to modernize our electronic health records (EHRs) and to make them interoperable with those of VA and our private sector providers.

Our service members, veterans, retirees, and their families deserve nothing less than the best possible healthcare and services that DoD and VA can provide. Our mission is to fundamentally and positively impact the health outcomes of active duty military, veterans, and eligible beneficiaries. To this end, DoD is committed to two equally important objectives: improving data interoperability with both VA and our private sector healthcare partners, and successfully transitioning to a state-of-the-market electronic health record that is interoperable with VA and the commercial healthcare systems used by our TRICARE network providers. Ultimately, this means that up-to-date and comprehensive healthcare information is available whenever and wherever it is needed to facilitate decisions.

I am proud to say that we have made significant progress in achieving both of these objectives. Today, DoD and VA share a significant amount of health data – more than any other two major health systems. DoD and VA clinicians are currently able to use their existing software applications to view records of more than 7.4 million shared patients who have received care from both Departments. This data is available today in near real time and the number of records viewable by both Departments continues to increase. Both Departments' healthcare providers and VA claims adjudicators successfully access data through our current systems nearly a quarter of a million times per week. As a result of this progress, DoD certified to Congress in November 2015 that it has complied with the FY14 National Defense Authorization Act (NDAA) requirement of interoperability with VA.

On a parallel path, DoD's modernization effort is well underway. In July 2015, the competitive contract for a new EHR was awarded to a team led by Leidos that includes 34 other partners. At the core of this modernization will be Cerner's EHR, one of the most widely used and trusted EHRs on the market today, used in nearly 18,000 facilities worldwide. Henry Schein will support

the dental component of the new EHR, and is also an industry-leading capability. In addition to utilizing the Cerner and Henry Schein suite of solutions, this new EHR system will continue to provider industry leading interoperability with the VA, other federal agencies, and the private sector by using federally recognized Office of the National Coordinator (ONC) standards.

DoD and VA remain in mutual agreement that interoperability with each other and our private sector care partners remains a priority. We agree that this broader interoperability is not dependent on a single system. This strategy makes sense for both Departments and provides the most effective approach moving forward to care for our service members, veterans, retirees, and their families. We continue to have direct senior-level oversight from both Departments as well as rigorous oversight from both Congress and the Executive Branch.

GOAL 1: PROVIDE SEAMLESS INTEGRATED SHARING OF STANDARDIZED HEALTH DATA AMONG DOD, VA, AND PRIVATE SECTOR PROVIDERS

In November 2015, DoD formally issued a letter to Congress certifying that it has met the requirement of interoperability in the FY14 National Defense Authorization Act (NDAA) by mapping all data in DoD's AHLTA outpatient EHR system to existing national standards. Based on the recommendations of DoD and VA functional representatives, DoD also integrated data from other DoD health IT systems, including inpatient, theater and pharmacy. We fully recognize that health IT continues to evolve and that we must continue to improve our capabilities. The complexity of our interoperability mission takes time and steadfast commitment. This process involves two of the world's largest healthcare providers, with hundreds of thousands of users, more than three hundred systems, and millions of data elements. This requires strong communication, collaboration, and technical leadership.

A tangible product of this work can be seen in the Joint Legacy Viewer (JLV), which provides an integrated display of DoD, VA, and TRICARE network provider data for clinicians and other users. For DoD clinicians, JLV is embedded directly into AHLTA, allowing any registered user to easily view a comprehensive picture of a beneficiary's health record, regardless of whether the data resides in AHLTA, VISTA, or a TRICARE network provider's EHR. JLV has received

considerable praise from both DoD and VA users, with many commenting on its ability to save time in clinical interactions and to allow benefits adjudicators to cross-reference retiree records with the more comprehensive medical record in JLV. Because of this positive feedback, DoD and VA have sought to rapidly expand access to JLV. Originally developed as a pilot program with 275 users at 9 sites in 2014, JLV has now been fielded to nearly every DoD medical facility, all major VA medical centers, and every Veterans Benefits Administration regional site, supporting over 70,000 registered users. Throughout this process, JLV has undergone rigorous testing, consistently scoring high marks for functionality and usability. Additionally, in its most recent assessment, DoD's Operational Test and Evaluation (OT&E) office verified that all previously identified defects have been corrected in the newest release, which will also be tested in the near future. As JLV usage has become more widespread, the Department has phased out existing legacy viewers as they become obsolete.

VA JLV End User Feedback

"My use of JLV is as a Rater on the Rating Board ... the time saved in finding this information on JLV is minutes vs. days, weeks and sometime months when I have to go back to the Veteran, VAMC or QTC to get to get the same information." - Rating Veterans Service. Representative, VBA Regional Office, Salt Lake City, UT

"I use JLV quite regularly for missing records cases. I know I am able to find all the electronically available progress notes and radiology notes in one view in JLV, without hunting through every category under the DoD records tab in CAPRI." – Military Records Specialist, Alaska VA HCS & Regional Office

"The format, the layout, and the customize-ability is fabulous; JLV may knock about a minute off the time to complete a teledermatology consultation. When I'm doing 50 or 60 a day, that's a BIG deal." -Dermatologist, VA Puget Sound HCS, Seattle

"This is really so helpful; I was able to retrieve the documents from Tripler/DoD which is exactly what I was looking for...without waiting to hear from Tripler to get them to me." – Senior Social Worker, Oncology/Hematology, VA Palo Alto HCS

"...it's a great tool for our clinicians. This morning I was able to locate a cardiac echocardiogram result for my colleague in less than 2 minutes." – Physician, Chief, Comp and Pen Service, VA San Diego Healthcare System

*Provided by Health Solutions Management, Health Informatics, Office of Informatics and Analytics, Veterans Health Administration (VHA) and Office of Information Technology (OI&T), Department of Veterans Affairs

Over the last 30 years, information technology has revolutionized industry after industry, dramatically improving the customer experience and driving down costs. Today, in almost every

sector besides health, electronic information exchange among different systems is a common way to do business. A cashier scans a bar code to add up our grocery bill. We check our bank balance and take out cash with a debit card that works in any ATM machine across the globe – regardless of who manages the ATM.

Achieving this type of seamless data integration is dependent on achieving a common set of technical standards across all healthcare venues, not on sharing the same software system. Since 2008, DoD and VA have been exchanging a significant amount of electronic information. Unfortunately, most of the information had not been standardized so that it could be used for automated reminders or clinical decision support. As an example, DoD and VA may have had different names for “heart rate” in their software systems, making it difficult for clinicians to integrate and track this vital sign across the Department. For data sharing and interoperability to be meaningful and useful to clinicians, healthcare data must be mapped to standard codes and displayed in a user-friendly way. Since the majority of care comes from outside of DoD, this is equally important for sharing data with our TRICARE network providers, who use a variety of different health IT systems.

Much of this work has been accomplished with the assistance of the DoD/VA Interagency Program Office (IPO), which leads and coordinates the two Departments’ adoption of and contribution to national health data standards to ensure seamless integration of health data between DoD, VA and private healthcare providers. To ultimately map the data to national standards, DoD and VA identified 25 prioritized data domains, such as allergies, immunizations, vital signs, and family history. Three of these domains contain no structured data to map, and one, radiology images, already exists in a common industry format. With the assistance of the IPO, DoD has completed the initial mapping of the remaining 21 domains requiring national standard terminologies, representing more than 1.8 million unique DoD clinical terms, thereby establishing the foundation for our seamless data integration. Over the past year, we have completed six additional mapping deliveries. DoD subject matter experts and the IPO conducted independent quality assurance reviews of these mappings to ensure their accuracy. Additionally, DoD has established a data governance process to actively manage and continually improve utilization of national standards as they evolve in the future. Further, virtually all clinically

relevant data is now mapped to national standards, increasing the ability to share this information with many different health IT systems in use by our TRICARE network providers. In the “heart rate” example mentioned previously, both VA and DoD clinicians will now see a common, standardized name for a patient’s heart rate that can also be matched up with data from the private sector. Moving forward, we recognize that interoperability requires continual improvement. To this end, we plan to regularly update our data maps to further improve the portability of healthcare information between EHR systems.

We are leveraging our knowledge and expertise with the VA to exchange health information with our TRICARE network providers. Today, more than sixty percent of all service member, dependent, and beneficiary healthcare is provided outside a military treatment facility through TRICARE network providers. DoD exchanges its electronic patient health data with the public and private sector through its connection to the national e-Health Exchange. DoD is focused on deploying private sector interoperability to our military treatment facilities around the country that have an associated private sector Health Information Exchange (HIE) that is connected to the eHealth Exchange. DoD is currently connected to 11 HIEs, and is one of 109 participants in the eHealth Exchange. DoD plans to connect to an additional 14 HIE partners in the coming year, with additional HIE partners possible throughout the year.

Our service members overseas face unprecedented challenges in some of the world’s most hostile environments, and an important part of preparing our Soldiers, Sailors, Airmen and Marines to face these challenges is the reassurance that we are committed to taking care of them once they return home safely. It is incumbent upon DoD and VA to ensure that our clinicians have access to accurate and timely data to fundamentally and positively impact the health outcomes of active duty military, veterans, and eligible beneficiaries. DoD has a steadfast commitment to maintaining and enhancing our interoperability efforts. Interoperability requires continual improvement, innovation, and collaboration to ensure our users have the right information at the right time to provide the best healthcare decisions for our service members, veterans, and their families.

GOAL 2: MODERNIZE THE ELECTRONIC HEALTH RECORD (EHR) SOFTWARE AND SYSTEMS SUPPORTING DOD AND VA CLINICIANS.

In addition, DoD's acquisition of a modernized EHR system reflects our unwavering commitment to providing our community with the best healthcare tools available and to further our Departments' interoperability efforts. In July 2015, following a robust open competition, DoD awarded a \$4.3 billion contract for a new EHR to a team led by Leidos that includes 34 other partners. At the core of this modernization is Cerner's EHR, one of the most widely used and trusted EHRs on the market today, used in nearly 18,000 facilities worldwide. This contract was awarded without protest and ultimately resulted in significant cost savings over original estimates. When DoD established the DHMSM Program Office, the initial rough order of magnitude cost estimate was around \$11 billion. However, through the rigor of our competitive acquisition process, the cost estimate has been revised downward to less than \$9 billion today. Moving forward, we are continuing to look for ways to further reduce the cost of the program across its life cycle to provide maximum value to our service members and the American taxpayer.

The new EHR will support our military's operational readiness by addressing the increasing demands across the spectrum of military operations and will be used in both garrison and operational environments. It will provide advanced healthcare decision support capabilities and will have the capability to integrate with medical devices and allow the use of mobile technologies to support our dynamic mission requirements. This will result in unprecedented patient engagement and promote user involvement for beneficiaries. Additionally, the product being provided by the Leidos Partnership for Defense Health (LPDH) can be configured to fit DoD's evolving needs, eliminating the timely and costly process of customizing systems to various requirements.

As part of our acquisition strategy, we have just finalized our system hosting strategy. DoD has decided to initially host data for the new EHR in Cerner's data centers. This decision allows DoD to take advantage of valuable proprietary Cerner health analytic and decision support tools and expands the population of calculable healthcare data beyond DoD, leading to more accurate

and meaningful analysis of healthcare trends. This ultimately aligns with the larger overall commercial-off-the-shelf strategy, pairing a commercial product with a commercial hosting solution.

The modernized EHR system will be rigorously and independently tested prior to and throughout deployment to ensure it meets operational requirements for effectiveness, suitability and interoperability with VA and TRICARE network providers. Testing will also ensure that the new EHR conforms to current DoD cybersecurity requirements under the Risk Management Framework, as required in the RFP, and that data is able to be securely shared across VA Trusted Internet Connection Gateways (TIC GWs), providing secure communication between VA and DoD networks. The system is currently undergoing contractor testing which is scheduled to be conducted from February 2016 through December 2016.

Our early engagement with industry reinforced the value of establishing a realistic deployment timeline that supports effective user adoption. Our aggressive timeline is consistent with similar EHR modernization efforts in the commercial industry. The program has tailored its acquisition strategy to streamline documentation and gain schedule efficiencies. We are committed to collaborating with industry and pursuing this modernization in a transparent and fair way that maximizes competition. As we speak, pre-deployment testing of the new EHR is nearing its end. In accordance with the NDAA, deployment is scheduled to start later this year at the Initial Operational Capability (IOC) sites in Washington State representing all three services. DHMSM leadership has completed the executive kickoff sessions at these locations to ensure all sites are fully prepared. Full Operational Capability (FOC), currently estimated for FY2022, will include deployment to medical and dental services of fixed facilities worldwide. Deployment will occur by region (three in the continental U.S. and two overseas) in 23 waves plus the IOC “wave.” Each wave will include an average of three hospitals and 15 physical locations, and last approximately one year. This approach allows DoD to take full advantage of lessons learned and experience gained from prior waves to maximize efficiencies in subsequent waves, increasing the potential to reduce the deployment schedule in areas where it is smart to do so.

The biggest challenge to deploying this new EHR is not technology, but gaining support for our new business processes. Over 550 DoD experts across the Services have spent the past 5 months participating in enterprise product design sessions to review, update, and validate more than 750 workflows, 2,500 enterprise design decisions, 300 enterprise content sets, and over 450 enterprise order sets. Ultimately, the new EHR represents a fundamental business transformation within DoD, and the bulk of our work moving forward is making sure our end-users and the DoD community as a whole are prepared to begin using this system once it comes online. Throughout our history, each service has had the ability to develop many of their own processes and procedures, especially when it came to the delivery of healthcare. Now, for the first time ever, the new EHR will merge all of the unique workflows and business cultures throughout the Military Health System (MHS), creating uniform business processes and workflows across the Department that will encompass more than just documenting medical conditions and clinical interactions. The new EHR will also drive scheduling, registration, financial, and patient engagement. This will require over-the-shoulder training at over 1200 locations worldwide, making it incumbent upon our program to ensure all stakeholders understand the significance of this cultural change and are prepared to move forward with it when the time comes.

CONCLUSION

Chairman Cochran and Ranking Member Durbin, thank you again for the opportunity to testify today. DoD has taken very seriously its responsibility to provide first-class healthcare to our service members and their beneficiaries, and to enable the seamless sharing of integrated health records with VA and our TRICARE network providers. Looking forward, we will continue to improve data sharing efforts with VA and the private sector to create an environment in which clinicians and patients from both Departments are able to share current and future healthcare information for continuity of care and improved treatment outcomes.

The Department greatly appreciates the Congress' continued interest and efforts to help us deliver the healthcare that our nation's veterans, service members, and their dependents deserve. Whether it is on the battlefield, at home with their families, or after they have faithfully concluded their military service, the Department of Defense and our colleagues at the

Department of Veterans Affairs will continue to work closely together, in partnership with Congress, to deliver benefits and services to those who sacrifice so willingly for our nation. Again, thank you for this opportunity, and I look forward to your questions.