#### STATEMENT BY

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BEFORE THE

#### HOUSE OVERSIGHT AND GOVERNMENT REFORM COMMITTEE

#### INFORMATION TECHNOLOGY SUBCOMMITTEE

AND

#### HOUSE VETERANS AFFAIRS COMMITTEE

#### OVERSIGHT AND INVESTIGATIONS SUBCOMMITTEE

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Chairman Hurd and Ranking Member Kelly, Chairman Coffman and Ranking Member Kuster, thank you for the opportunity to address your respective subcommittees today on the state of information technology (IT) within Department of Defense (DoD) and our efforts to achieve interoperability with the Department of Veterans Affairs (VA). 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 providers.

Since October 2013, 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 will certify to Congress that it has complied with the FY14 National Defense Authorization Act (NDAA) requirement of interoperability with VA by the end of this month.

On a parallel path, DoD's modernization effort is well underway. An independent analysis of both our own requirements in 2013 and the robust healthcare IT marketplace concluded that the acquisition of an off-the-shelf product would allow DoD to leverage the latest commercial technologies, improve usability and interoperability with the private sector as well as with VA,

and ultimately provide savings to the American taxpayer. Most importantly, interoperability with VA and the private sector remains paramount. The new EHR system will seek to achieve greater interoperability with the VA, other federal agencies, and the private sector by using federally recognized Office of the National Coordinator (ONC) standards. The contract for this new EHR was competitively awarded without protest in July 2015 to a team led by Leidos that includes 34 other partners.

DoD and VA remain in mutual agreement that interoperability with each other and our private sector care partners is a top 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

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 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 in electronic clinical decision support. As an example, DoD and VA had different names for "blood glucose" in their software systems, making it difficult for clinicians to integrate and track blood sugar levels of diabetics across the Departments. 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 private sector 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. With the assistance of the IPO, DoD has completed the initial mapping of all 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 four data 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. These domains are available to VA clinicians and benefits analysts through the Defense Medical Information Exchange (DMIX) Program and the Health Artifact and Image Management Solution (HAIMS). Further, much of our data is now mapped to national standards, increasing the ability to share this information with many different health IT systems in use by our private care partners. In the "blood glucose" example mentioned previously, both VA and DoD clinicians will now see a common, standardized name for a patient's blood glucose results 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 upgrade these national standards and data maps with regular updates to further improve the portability of healthcare information between EHR systems.

Building upon the achievement of common data standards set between the two Departments, DoD has continued to develop and deploy follow-on interoperability initiatives through the DMIX program office. DMIX is responsible for coordinating DoD's interoperability efforts with VA and the private sector and has developed a schedule that includes mapping DoD data and clinical domains for which there is structured data, continued deployment of a joint viewer

providing an integrated display of DoD, VA and private sector data for clinicians, and planning the testing of DoD's EHR modernization acquisition for interoperability requirements. So far, DMIX has delivered iterative software releases over 21 months that included key functional engagement from both Departments. They also included rigorous pre- and post-operational assessments led by DoD's independent testing activity.

This work includes development and expansion of the Joint Legacy Viewer (JLV), which provides an integrated display of DoD, VA, and private sector data for clinicians. The Department has expanded the capacity, functionality, and number of users of JLV. Originally developed as a pilot program with 275 users at 9 sites, DoD has now fielded the JLV to more than 70 locations with over 8,480 DoD users. JLV also supports nearly 19,000 VA users at 150 VA Medical sites and at 56 out of the 57 Veteran Benefits Administration Regional sites. As JLV capacity and use increase, the Department will begin to phase out existing legacy viewers, with full consolidation planned in FY 2016. On September 18, 2015, DMIX received Milestone C approval based on testing results, and readiness for system deployment and operational use. Testing included aggressive cybersecurity assessments intended to pinpoint potential weaknesses in DMIX data security. During the testing, DMIX successfully executed 262 out of 269 test cases, with the unsuccessful test cases being addressed in subsequent program releases. User assessments significantly exceeded the required score for functionality and usability, scoring a 77 out of a required 70. Further follow on independent operational and cybersecurity testing is planned for later this fiscal year.

We are leveraging our knowledge and expertise with the VA to exchange health information with our TRICARE healthcare providers. Today, more than 60% 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 8 HIEs, and is one of 107 participants in the eHealth Exchange. DoD plans to connect to an additional 7 HIE partners by the end of the

calendar year, based on functional and business factors. In 2016, we plan to continue to onboard additional HIE partners as our mission dictates.

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 will reflect our unwavering commitment to providing our community with the best healthcare tools available and to furthering our Departments' interoperability efforts. DoD's analysis in 2013 found that many viable commercial EHR products could potentially meet our requirements in a cost-effective manner that would allow us to benefit from industry's competitive EHR software marketplace.

Since October 2013, the Defense Healthcare Management System Modernization (DHMSM) program has conducted multiple Industry Days and released multiple Requests for Information and draft RFPs. The final RFP was released on August 25, 2014 and proposals were submitted on October 31, 2014. The source selection process was conducted using robust evaluation procedures with analysis provided by functional, technical, and cost subject matter experts, including those with VA and ONC. Simultaneously, the DoD healthcare community engaged over 800 subject matter experts representing medical specialty and care provider subgroups throughout the Services to determine standard clinical business processes that will be used to

configure the new EHR. DoD awarded the contract without protest to a team headed by Leidos in July 2015. The modernized EHR system will be rigorously and independently tested prior to and throughout deployment to ensure it meets operational and interoperability requirements for effectiveness, suitability and interoperability with VA and private sector healthcare providers. Testing will also ensure that the new EHR conforms to current DoD cybersecurity and DoD Risk Management Framework requirements, 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 via the Medical Community of Interest (MED-COI) Enterprise Gateways.

Our early engagement with industry also 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. In alignment with the deadline set out in the FY2014 NDAA, Initial Operational Capability is planned for the end of 2016 at eight sites, representing all three Services, in Washington State. Full Operational Capability, 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.

Ultimately, the cost savings of this new strategy over the previous one is substantial. DoD's portion of the previous iEHR strategy alone was over \$16 billion. With the advent of DHMSM, the initial rough order of magnitude cost estimate was around \$11 billion, an immediate savings of nearly \$5 billion. However, through the rigor of our competitive acquisition process, the cost estimate has been revised downward to a cost of 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.

#### CONCLUSION

Chairman Hurd and Ranking Member Kelly, Chairman Coffman and Ranking Member Kuster, 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 private sector healthcare partners. 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.



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As the Program Executive Officer (PEO) for the DoD Healthcare Management System (DHMS), Mr. Miller reports directly to the Under Secretary of Defense for Acquisition, Technology and Logistics as the DoD Milestone Decision Authority for the Defense Healthcare Management System.

From January 2010 to September 2013, Mr. Miller served as Executive Director and senior civilian official of Space and Naval Warfare Systems Center Atlantic. He set command-wide strategic goals and managed engineering and business operations for more than 3,600 federal civilian and military employees, and 13,000 industry partners at the main campus in Charleston, S.C., and several offices located inside and outside the continental United States.



Appointed to the Senior Executive Service in May 2006, Mr. Miller previously served as the Navy's Program Executive Officer for Command, Control, Communications, Computers and Intelligence (PEO C4I) and was directly responsible for more than 125 Navy C4I programs providing the warfighter integrated communication, information technology and intelligence systems that enable command and control of military forces. The organization won the first-ever ASN RDA Acquisition Excellence Award in the Major Acquisition Activity category for 2008, as well as the FY08 Department of Defense (DoD) Best Overall CPI Program for Echelon II organizations.

He started his federal civilian service in 2001 at the Space and Naval Warfare Systems Command as a systems engineer leading the development of a software baseline which is now the foundation of the Navy's largest tactical network. In 2005 Mr. Miller was selected Director of Modernization for PEO C4I. He was charged with establishing C4I Network Centric Warfare objectives and a roadmap to drive program execution and alignment with FORCEnet and open architecture initiatives.

From 1999 through 2001, Mr. Miller was employed by Booz | Allen | Hamilton in San Diego, Calif., supporting numerous Navy command and control programs in management positions in program management and strategic planning.

Mr. Miller is a graduate of the Naval Reserve Officer Training Corps and was commissioned a United States Marine Corps second lieutenant in May 1995. Upon completion of The Basic School and the Naval Intelligence Officer's Basic Course, Mr. Miller was assigned to Marine Medium Helicopter Squadron 164 (HMM-164) in 1996. As the squadron's Intelligence Officer he completed a deployment to the Western Pacific and supported Operation Southern Watch. In 1998 Mr. Miller was assigned to Marine Aircraft Group 16 (MAG-16) where he served as the Intelligence Officer for the largest Marine Aircraft Group. In this capacity, he coordinated intelligence support and training for 12 deploying squadrons and provided C4I leadership. Mr. Miller left active duty service in May 1999.

Mr. Miller graduated from Vanderbilt University in Nashville in 1995 with a bachelor's degree in American History and Political Science. He has attended numerous classes from Defense Acquisition University and is certified level III in program management. He also holds a Systems Engineering Certification from the University of California San Diego.

Mr. Miller is a member of the Acquisition Professional Corps, Armed Forces Communications and Electronics Association (AFCEA) and the United States Naval Institute (USNI). His awards include the 2010 Presidential Rank Award; the Medal of Order of Resplendent Banner with Cravat from the Republic of China (Taiwan) in May 2012; two Department of the Navy Superior Civilian Service Awards; a Navy and Marine Corps Achievement Medal; and the AFCEA and USNI Copernicus Award.