MILITARY CONSTRUCTION, VETERANS AFFAIRS, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2020

TUESDAY, FEBRUARY 5, 2019

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:30 a.m. in room SD–124, Dirksen Senate Office Building, Hon. John Boozman (chairman) presiding.

Present: Senators Boozman, Schatz, Collins, Capito, Daines, Tester, Udall and Baldwin.

DEPARTMENT OF VETERANS AFFAIRS

STATEMENT OF HON. JAMES BYRNE, GENERAL COUNSEL PERFORMING THE DUTIES OF DEPUTY SECRETARY

ACCOMPANIED BY:

JOHN WINDOM, EXECUTIVE DIRECTOR, OFFICE OF ELECTRONIC HEALTH RECORD MODERNIZATION
DR. LAURA KROUPA, CHIEF MEDICAL OFFICER (ACTING), OFFICE OF ELECTRONIC HEALTH RECORD MODERNIZATION
JOHN SHORT, CHIEF TECHNOLOGY INTEGRATION OFFICER, OFFICE OF ELECTRONIC HEALTH RECORD MODERNIZATION

OPENING STATEMENT OF SENATOR JOHN BOOZMAN

Senator BOOZMAN. The committee will come to order. You guys can have a seat. Good morning, and thank you for coming today to discuss the Department of Veterans Affairs Electronic Health Record Modernization Effort.

I would like to begin by recognizing today's panel: the Honorable James Byrne; VA's General Counsel, Performing the Duties of the Deputy Secretary. Thank you for being here. He is accompanied by leadership in VA's Office of Electronic Record Modernization, including Mr. John Windom, Executive Director, Dr. Laura Kroupa, Acting Chief Medical Officer, and Mr. John Short, Technology Integration Officer. So thank you all for being here, and we do appreciate your service to the—for our veterans.

For years, the Department of Defense and VA struggled to share health information to service members transitioned to civilian life. Even within VA, there were more than 130 different version of VISTA, the legacy electronic medical record. Last May, VA kicked off a 10-year, $16 billion effort to modernize VA's health IT system. This includes a $10 billion contract with Cerner by adopting the same (EHR) Electronic Health Record platform as DoD. VA argued

that the patient data would be seamlessly shared between DoD, VA, and community providers, improving efficiency and transparency.

Many of us on this committee have long advocated for a single, joint medical record that will follow a service member throughout their career in the military and into their time as a veteran. We are hopeful that this collaboration between VA, DoD, and Cerner can deliver on this vision.

Since last May, VA has undertaken efforts to address lessons learned from past EHR modernization initiatives. VA conducted detailed workflow analysis, technology assessments, change of management workshops, and outreach to key stakeholders. However, challenges remain, including interoperability with both legacy and community health systems, simultaneous implementation with other initiatives, and spending at a lower than expected rate. Perhaps the most important challenge facing VA is the need for its workforce to embrace what will be a wholesale change in the way they do business on a daily basis. We look forward to discussing these and other issues this morning. And also, this is our first meeting, I believe, without Chad Schulken, who did a tremendous job on the minority staff. You know, the nice thing about these committees is that the staff and members work together so very well. We hear a lot about the rancor, but he did a tremendous job, and I know he will do a great job wherever he is at, but he will be missed.

And now, I will turn to our Ranking Member, Senator Schatz from Hawaii for his opening statement.

OPENING STATEMENT OF SENATOR BRIAN SCHATZ

Senator SCHATZ. Thank you, Mr. Chairman and thank you for holding today's hearing on the VA's effort to modernize its electronic health record system. This is particularly important as we prepare to consider the Department's fiscal year 2020 budget and fiscal year 2021 advance request.

A new electronic health record has the potential to be transformational. This is an opportunity to improve patient care with seamless health data sharing between DoD and VA as well as community providers, and that is why in last year's appropriations bill, we provided more than a billion dollars so that the Department can get this system going. That includes more than $400 million, specifically to improve IT infrastructure. Now, we all know this process has not been easy for VA and that there were some initial challenges with rolling out the contract and the system. There were contracting delays and issues with aligning the project management and deployment with Department of Defense, but the VA has taken some important steps to address these problems. Last September, the VA and DoD issued a joint commitment which makes clear that they will work together to coordinate project and data management and develop and organizational structure that will deliver a single, seamlessly integrated, and interoperable EHR. That is the goal.

But a commitment is only as strong as the willingness of each party to follow through and so I look forward to hearing from our witnesses about exactly how both Departments are planning to de-

liver on their promise to service members and veterans. As VA obligates and spends the funding that Congress provided for EHR, the Department needs to remain transparent about the status, the funding, and continue to provide regular updates, and that is especially important at the early stages. This information will help us as appropriators better meet the VA's needs and serve our veterans. And it gives us the confidence that you are making thoughtful decisions that will prevent cost overruns and schedule delays and other avoidable pitfalls.

Finally, Mr. Chairman, I want to express my frustration and disappointment with how the VA has engaged Congress on its proposed access standards for the new Veterans Community Care Program created under the Mission Act.

Members of the majority and minority, authorizers, and appropriators have made repeated requests for information to hear from VA about what information the Department relied on to inform its decisionmaking and the potential budgetary implications of expanding eligibility for veterans to seek care in the community.

The VA can and should ensure access for all veterans by relying on community providers, that is especially important for veterans who live in rural and remote areas, but it cannot come at the expense of VA's internal healthcare system.

But we do not have any analysis or projections about how the proposed access standards will effect utilization rates, and as a result, how it will affect the cost of VA's Community Care Program. And as a result, how it will interact with core VA services. Now I know that is not why we are here today, but we have a responsibility to the American people and to the Veterans Administration to ensure the VA's leadership is making decisions that are consistent with Congress' intent.

I will have more to say on this as the VA files its proposed rule in the Federal register. And look forward to hearing from Secretary Wilkie directly when he comes before the subcommittee to present the Department's advance budget request.

Thank you, Mr. Chairman.

Senator BOOZMAN. Mr. Byrne.

SUMMARY STATEMENT OF HON. JAMES BYRNE

Mr. BYRNE. Good morning. Chairman Boozman, Ranking Member Schatz, distinguished members of the subcommittee. Thank you for the opportunity to testify about the Department of Veterans Affairs Initiative to transform veterans' care through modernizing VA's electronic health records system, EHR. And thank you for your unwavering support of veterans, their families, caregivers, and survivors.

Mr. Chairman, please let me start with some recent good news from VA. First, you may have seen the Dartmouth report from the *Annals of Internal Medicine* that found, "VA healthcare is as good or better than any care our American people receive in any part of the country."

Second, the partnership for public service, a nonprofit think tank that values the work of our Federal agencies reported that for the first time, VA is now one of the best places to work in the Federal Government. Moving from 17th place to 6th place.

Last, a new study from the *Journal of American Medical Association, JAMA*, recently found that, "Access to care within VA facilities appears to have improved between 2014 and 2017 and appears to have surpassed access in the private sector for three of the four specialties evaluated." I believe these reports reflect the quality of how all of our employees and the hard work they do on behalf of veterans and taxpayers every day.

Today, I am excited to be here to discuss the opportunities presented by our modernization of VA's electronic health record system. Does it mean that the implementation of our new EHR system will be simple, easy, or without hurdles? It is, in fact, a complex, difficult, time-consuming job. We appreciate the congressional funding of this critical modernization effort and welcome the committee's oversight as we negotiate this critical task.

But as we move forward, I would like to remind all of my VA colleagues of some important facts: First, EHR modernization was not forced on us. This transformation is something that we, at VA, decided had to be done, because it makes sense and is best for veterans. Second, we must always keep our eyes on what those in the military refer to as the commander's intent. For VA and the end state of our EHRM efforts. VA exists to make life better for veterans. That is what transforming our EHR system and adopting the same system at DoD is all about. Meeting the challenging and evolving needs of veterans, improving their lives and their care, and making the system easier and more efficient for them.

We need to constantly remind ourselves that when we complete this difficult, complex transformation, there will be tangible, measurable benefits for veterans, including but not limited to, patient data residing in a single site with records updated instantly at the time of care. Seamless transitions as service members become veterans and equally seamless access to quality care when veterans move between DoD, VA, and community care providers.

Much greater ease in sharing health information that will result in care delivered in a more timely and safe manner. Scheduling of appointments, reimbursement of community providers, and critically, research of healthcare issues of special importance to veterans will all be easier and more efficient.

And finally, care provided by one member of a veteran's care team will be transparent to all members of the team and to the veteran, especially important in treating patients at risk of suicide or opioid abuse. Our goal is to deliver an EHR system that is easy to understand, simple to administer, and meets veterans' needs. And now is the time to modernize. It is the right thing to do for veterans. This is our Commander's intent and how we see the end state of our EHRM efforts. As we strive for that end state, we at VA are committed to transparency and close coordination with DoD and all aspects of modernizing our EHR system and from learning all we can from their previous work with Cerner.

We are ensuring our new EHR system is in alignment with commercial best practices, and we have every confidence that it does. We are determined to engage clinicians in the field who interact with veterans and their families each day to ensure we have their immediate, real time feedback on what works best to best serve veterans.

Mr. Chairman, as I have traveled the VA medical centers across the country, I have encountered a sense of excitement about EHRM. On many occasions, I have had hospital directors, administrators, and clinicians ask me how their facility could be moved up on the schedule for fielding the new EHR system. Those who work most closely with veterans in providing care know that our current system is simply insufficient and recognize the vast potential the new EHR system represents: improvements in timeliness and quality of care, efficiencies in presentation of data, and prescription and administration of pharmaceuticals, and reducing risk for patients, treatment of chronic conditions, reduction in suicides, and in many other areas of care and treatment. They want it now, because they know it will help veterans.

Mr. Chairman, in closing, thank you and all the members of the subcommittee once again for your support of veterans and VA. You have provided the funds for us to make this leap forward in care that will help veterans, their families, and caregivers. We recognize the importance of what we are about, the need for transparent and careful use of appropriated funds, and the need to move forward quickly but carefully as we make strides not only for our nation's veterans but in areas that surely pay dividends for better care of Americans in the future. We are all committed to strengthening the VA system. EHRM will help us do that and strengthen the ties that bind veterans to their VA.

Thank you, sir, and we look forward to your questions.

[The statement follows:]

PREPARED STATEMENT OF HON. JAMES BYRNE

Good morning Chairman Boozman, Ranking Member Schatz, and distinguished Members of the Subcommittee. Thank you for the opportunity to testify today in support of the Department of Veterans Affairs (VA) initiative to modernize its electronic health record (EHR) through the acquisition and deployment of the Cerner Millennium EHR solution. I am accompanied today by Mr. John Windom, Executive Director of the Office of Electronic Health Record Modernization (OEHRM), Dr. Laura Kroupa, Acting Chief Medical Officer of OEHRM and Mr. John Short, Technology and Integration Officer of OEHRM.

I want to begin by thanking Congress, and specifically this Subcommittee, for your continued support and shared commitment for the program's success. Because of your continued support, VA has been able to stay on track for implementation, enabling us to continue our mission of improving healthcare delivery to our Nation's Veterans and those who care for them while being a good steward of taxpayer dollars.

BACKGROUND

On May 17, 2018, VA awarded an Indefinite Delivery/Indefinite Quantity (ID/IQ) EHR contract to Cerner. Given the complexity of the environment, VA has awarded this ID/IQ to provide maximum flexibility and the necessary structure to control cost. Through this acquisition, VA will adopt the same EHR solution as the Department of Defense (DoD). The solution allows patient data to reside in a single hosting site using a single common system to enable the sharing of health information, improve care delivery and coordination, and provide clinicians with data and tools that support patient safety. VA believes that implementing a single EHR will allow for seamless care for our Nation's Servicemembers and Veterans.

PROGRAM MILESTONES

Since contract award, VA has accomplished several key events outlined below.

Task Orders

As mentioned earlier, VA awarded the Cerner contract on May 17, 2018. VA also awarded the first three Task Orders (TO), which are project management, Initial

Operating Capabilities (IOC) site assessments, and data hosting. In September of 2018, VA awarded three TOs for Data Migration and Enterprise Interface Development, Functional Baseline Design and Development and IOC Deployment. By leveraging the ID/IQ contract structure, VA can award TOs as needs arise and negotiate firm-fixed- prices on an individual TO basis, allowing VA to moderate work and modify deployment strategies efficiently. Below are additional details regarding the TOs:

—*Task Order 1- EHRM Project Management, Planning Strategy, and Pre-IOC* Under this task order, Cerner will provide project management, planning, strategy, and pre-IOC build support. More specifically, the scope of services included in this task order are project management; enterprise management; functional management; technical management; enterprise design and build activities; and pre-IOC infrastructure build and testing.

—*Task Order 2- EHRM Site Assessments—Veterans Integrated Service Network (VISN) 20* Under this task order, Cerner will conduct facility assessments, to prepare for the commercial EHR implementation, for the following VISN 20 IOC sites: Mann- Grandstaff VA Medical Center (VAMC) (Spokane WA), Seattle VAMC, and American Lake VAMC (Tacoma, WA). Cerner will also provide VA with a comprehensive current-state assessment to inform site-specific implementation activities and task order-specific pricing adjustments.

—*Task Order 3- EHRM Hosting* Under this task order, Cerner will be funded to deliver a comprehensive EHRM hosting solution and start associated services to include hosting for EHRM applications, application services, and supporting EHRM data.

—*Task Order 4- Data Migration and Enterprise Interface Development* Cerner will provide data migration planning refinement, analysis, development, testing, and execution. Cerner will support enterprise interface planning refinement, design, development, testing, and deployment. Cerner will provide commercially available registry selected by VA for IOC as well as details and updates on the progress of IOC data migration and enterprise interface development.

—*Task Order 5- Functional Baseline Design and Development* Cerner will provide project management, workflow, training, change management, and EHRM stakeholder communication.

—*Task Order 6- IOC Deployment* Cerner will provide: project management; IOC planning and deployment; test and evaluation; pre-deployment training; go-live readiness assessment, deployment, and release; go-live event; post-production health check and deployment completion; post-deployment support; and continued deployment decision support.

Current State Review

In July 2018, VA and Cerner conducted a Current State Review at VA's IOC sites to gain an understanding of the sites' specific as-is state, and how it aligns with the Cerner commercial standards to implement the proposed to-be state. The team conducted organizational reviews around people, process, and technology. They observed and captured current state workflows; identified areas that will affect value achievement and present risk to the project; identified benefits from software being deployed; and identified any scope items that need to be addressed.

VA reviewed final reports analyzing the Current State Review in October 2018 and discovered there are infrastructure readiness areas that are in better condition than initially forecasted and areas that require slightly more investment due to aging infrastructure. However, there were no unexpected major needs or significant deviations from the current projected spend plan.

Model Validation Event

In September 2018, VA held its Model Validation Event, where VA's EHR Councils met with Cerner to begin the National and local workflow development process for VA's new EHR solution. There was a series of working sessions designed to examine Cerner's commercial recommended workflows and evaluate the current workflows used at VAMCs. This allows VA to configure the workflows to best meet the needs of our Veterans, while also implementing commercial best practices.

Cerner Baseline Review

VA is committed to align its workflows closely with commercial best practices; therefore, VA commissioned Cerner to complete a baseline assessment of how closely DoD's MHS GENESIS aligns with these practices. In September 2018, Cerner presented the results of the assessment. VA learned DoD has high adoption of rec-

ommendations and system configuration, which are generally in alignment with commercial best practices.

OEHRM ORGANIZATIONAL STRUCTURE AND STRATEGIC ALIGNMENT WITH DOD

On June 25, 2018, VA established OEHRM to ensure VA successfully prepares for, deploys, and maintains the new EHR solution and the health IT tools dependent upon it. OEHRM reports directly to VA Deputy Secretary and works in close coordination with VA Veterans Health Administration and Office of Information Technology. Mr. Windom currently serves as the program's executive director and has supported the effort at a leadership-level since its inception. Prior to joining VA, Mr. Windom was a Program Manager for the Program Executive Office of the Defense Healthcare Management Systems (DHMS).

To ensure appropriate VA and DoD coordination, we emphasize transparency within and across VA through integrated governance and open decisionmaking. The OEHRM governance structure has been established and is operational, consisting of technical and functional boards that will work to mitigate any potential risks to the EHRM program. The structure and process of the boards are designed to facilitate efficient and effective decisionmaking and the adjudication of risks to facilitate rapid implementation of recommended changes.

At an inter-agency level, the Departments are committed to instituting an optimal organizational design that prioritizes accountability and effectiveness, while continuing to advance unity, synergy, and efficiencies between VA and DoD. The Departments have instituted an inter-agency working group to review use-cases and collaborate on best practices for business, functional, and IT workflows, with an emphasis on ensuring that interoperability objectives are achieved between the two agencies. VA's and DoD's leadership meet regularly to verify the working group's strategy and course correct when necessary. By learning from DoD, VA will be able to address challenges proactively and reduce potential risks at VA's IOC sites. As challenges arise throughout the deployment, VA will mitigate adverse effects to Veterans' healthcare.

IMPLEMENTATION PLANNING AND STRATEGY

It will take OEHRM several years to fully implement VA's new EHR solution and the program will continue to evolve as technological advances are made. The new EHR solution will be designed to accommodate various aspects of healthcare delivery that are unique to Veterans and VA, while bringing industry best practices to improve VA care for Veterans and their families. Most medical centers should not expect immediate major changes to their EHR systems.

VA's approach involves deploying the EHR solution at IOC sites to identify challenges and correct them. With this IOC site approach, VA will hone governance, identify efficient strategies, and reduce risk to the portfolio by solidifying workflows and detecting course correction opportunities prior to the deployment at additional sites. As mentioned, VA and Cerner have conducted Current-State Reviews for VA's IOC sites. These site assessments include a current-state technical and clinical operations review and the validation of the facility capabilities list. VA started the go-live clock for the IOC sites, as planned, on October 1, 2018.

Further, VA is continuing to work proactively with DoD and experts from the private sector to reduce potential risks during the deployment of VA's new EHR by leveraging DoD's lessons learned from its IOC sites. Several examples of efficiencies that VA is leveraging are: revised contract language to improve trouble ticket resolution based on DoD challenges; optimal VA EHRM governance structure; fully resourced PMO with highly qualified clinical and technical oversight expertise; effective change management strategy; and using Cerner Corporation as a developer and integrator consistent with commercial best practices.

During the multi-year transition effort, VA will continue to use Veterans Information System and Technology Architecture (VistA) and related clinical systems until all legacy VA EHR modules are replaced by the Cerner solution. For the purposes of ensuring uninterrupted healthcare delivery, existing systems will run concurrently with the deployment of Cerner's platform while we transition each facility. During the transition, VA will ensure a seamless transition of care. A continued investment in legacy VA EHR systems will ensure patient safety, security, and a working functional system for all VA healthcare professionals.

CHANGE MANAGEMENT AND WORKFLOW COUNCILS

Because the program's success will rely heavily on effective user-adoption, VA is deploying a comprehensive change management strategy to support the transformation to VA's new EHR solution. The strategy includes providing the necessary

training to end-users: VAMC leadership, managers, supervisors, and clinicians. In addition, there will be on-going communications regarding deployment schedule and anticipated changes to end-user's day-to-day activities and processes. VA will also work with affected stakeholders to identify and resolve any outstanding employee resistance and any additional reinforcement that is needed.

VA has established 18 EHR Councils (EHRC) to support the development of national standardized clinical and business workflows for VA's new EHR solution. The councils represent each of the functional areas of the EHR solution, including behavioral health, pharmacy, ambulatory, dentistry, and business operations. VA understands that to meet the program's goals we must engage frontline staff and clinicians. Therefore, the composition of the EHRCs will continue to be about 60 percent clinicians from the field who provide care for Veterans, and 40 percent from VA Central Office. As VA implements its new EHR solution across the enterprise, certain council membership will evolve to align with contemporaneous implementation locations. While deploying in a particular VISN, the needs of Veterans and clinicians in that particular VISN will be incorporated into national workflows.

FUNDING

With the support of Congress, OEHRM has not experienced funding shortfalls that would impact the success of the EHRM initiative. OEHRM reviews its lifecycle cost estimate at least once per month to reflect actual execution and to fulfill its programmatic oversight responsibilities. OEHRM will provide Congress with regular updates to ensure that the program is fully funded and to support our commitment to transparency. VA's enacted fiscal year 2019 budget of $1,107 million allows VA to continue the implementation, preparation, development, interface, management, rollout, and maintenance of the EHRM initiative. The 2019 enacted budget comprises the following:

—$575 million in the EHR Contract subaccount used for Enterprise Integration task orders, Technology Acquisition Center fees, site assessments, and change management,

—$120 million in the Program Management subaccount used for contract support staff, pay and benefits, travel and administrative expenses, and

—$412 million in the Infrastructure Readiness subaccount for end user devices, testing activities, interfaces, and Medical Community of Interest, or MedCOI.

CLOSING

Again, the EHRM effort will enable VA to provide the high-quality care and benefits that our Nation's Veterans deserve. VA will continue to keep Congress informed of milestones as they occur. Mr. Chairman, Ranking Member, and Members of the Subcommittee, thank you for the opportunity to testify before the Subcommittee today to discuss one of the VA Secretary's top priorities. I would be happy to respond to any questions that you have.

Senator BOOZMAN. Thank you. I will go ahead and get started. Mr. Byrne, interoperability with legacy systems remains a challenge across the board for new VA IT systems. We are currently watching VA struggle to implement changes to the G.I. Bill that resulted in IT challenges. The scope and scale of the challenges the VA will face in the EHR modernization endeavor cannot be understated. It is something that we simply cannot fail in.

VA will be rolling out the modernized EHR system. At the same time, it is implementing the sweeping changes required under the Mission Act and other changes in law, $16 billion dollars over 10 years. Somebody was telling me, you can appreciate this as an old Naval Academy graduate. I think—did you tell me you had a son on submarines?

Mr. BYRNE. Yes sir, I do.

Senator BOOZMAN. Thank you very much. So we appreciate that service, but I think the new aircraft carrier is $13, $14 billion. So this is a huge undertaking, huge expense. So I guess, my question is, what steps is the VA taking to ensure that we will have interoperability between new EHR system and VISTA? How is VA going

to ensure that data from community care providers is quickly fed back into the new EHR?

Mr. BYRNE. So the first part of your question, sir, I think you asked about your concern with the implementation of Colmery and within (VBA) Veterans Benefits Administration. And so, I would like to differentiate the two of those, basically, and then I would like, with your permission to pass the question off to Mr. Windom, because I think you had several questions within that, I hope he was taking notes on them.

Senator BOOZMAN. He was busy.

Mr. BYRNE. But the first is with the implementation of the electronic solution for Colmery and the payment of education benefits. That was a homegrown solution, which I will differentiate between what we are doing now, which is an off-the-shelf purchasing of Cerner, a system that has sort of been proven across the industry and so I want to differentiate the two of those, why I think we should have a higher confidence in Cerner. It is proven in the marketspace. And so, I differentiate the two of those. I have asked Mr. Windom to address—I think there were six questions within that.

Mr. WINDOM. Thank you, Mr. Chairman. The interoperability element is our primary objective. Not only interoperability within the VA, between DoD and the VA and also with our community providers. So at the forefront, I think, as we look at the challenges and implementation like this, we face, it is about putting the right people, the right team together. We have been leveraging DoD and lessons learned. I can assure you, our relationship has only grown over the past 22 months that I have been on board. And so, being able to understand their challenges, this is hard for a reason. And so, we are communicating weekly with not only our weekly one-hour sessions but our monthly sessions. So that exchange of ideas and communication is ongoing.

I will tell you that we have got a number of strategies that we are employing with that I am going to turn it over to Dr. Kroupa to talk about that clinical information exchange that data exchange, because again, this is about user adoption. This is about the willingness of the end users to use the technical solution that we are bringing the bear. And so that training mechanism, those exchange management strategies are all imperative, and I think we are doing that as part of both our national workshops and our local workshops where we are engaging both headquarters and field to ensure an understanding of the direction. So I am going to pass it off, because I think that data movement, that data migration, that data access is important. So Dr. Kroupa, if you do not mind.

Dr. KROUPA. Sure. So we are doing a couple of things. One thing we are doing right off the bat is moving a lot of our data into the Cerner system for all patients across the country before our first go live. So we have 20 domains of patient data that will be front loaded into the Cerner product. So that those—that data will be available to DoD sites and also be available at our IOC sites. So that clinicians will not have to work without the data that has been accumulated in VISTA over time.

One of the things that we are going to accomplish with this system is interoperability between VAs, because right now, as you

said—we have 130 different systems. So now folks will be able to see all of the records for across the country when we go live on Cerner as well as the DoD sites.

The interoperability with the community is obviously a national issue. It is not just a technical issue. Using a Cerner hub will allow us to exchange information with community partners, and we hope to be able to grow and move that forward as we gain traction with Cerner. So some of that comes down to business rules and relationships and really making the case that this is important for our veteran care.

Senator BOOZMAN. Very good. Senator Schatz.

Senator SCHATZ. Thank you, Mr. Chairman. I am concerned about VA's relationship with Congress when it comes to oversight and so I am just going to ask you, Mr. Byrne, a simple question, and I think you can answer on behalf of the rest of the team.

Do you commit to responding promptly to written questions from members of this subcommittee including the Chair and Ranking Member beyond the quarterly reports on EHR and other matters?

Mr. BYRNE. Certainly.

Senator SCHATZ. Thank you. I am looking at the appropriated money for last fiscal year, roughly $1.1 billion and you have a planned $25 million carryover which ends up being $205 million carryover. So then the spend plan for fiscal year 2019 is $1.287 billion. You have got $37.5 million obligated and roughly $9 million spent. I guess the first question is, are you on pace to spend this money in time? That is the first question. And then the second question, becomes, if not, how do we know, so that we can calibrate our appropriations so we are not appropriating money into a pile?

Mr. BYRNE. So I will take a quick stab at that and then kick it over to Mr. Windom who is intimate with those exact numbers.

Senator SCHATZ. He smiled a lot.

Mr. BYRNE. Because he is chomping at the bit ready to answer this question. But I would like to insert, sir, that IOC, we anticipate going live here in the beginning of the second quarter, and we are going have a whole lot better picture of our spend rate and our ability to move forward at that time. So that is not really a specific answer to your question, but we are in a little bit of a wait-and-see method there.

You give us three-year monies. That was appropriate as we spent up, and we are appreciative of that. I would ask Mr. Windom to maybe address the very specifics of your questions.

Mr. WINDOM. Sir, I understand your concerns. I have had an opportunity to speak with your staff, and I appreciate the latitude you have given this program with three-year money. I think, though, the way I would answer your question is, you have challenged me to be fiscally responsible and fiducially responsible. And that we will not frivolously spend money without a bona fide need.

There is a bona fide need for the resources that have been allocated. I cannot take the budget and just divide by four and have an equal expenditure in each quarter. We want to make sure our timing is correct. For example, many times we buy equipment prematurely, and you have to warehouse it. You have to put it in warehouses which now makes software go obsolete and things like

that. So you will see, just-in-time-buys that we are employing for infrastructure buys.

We do not want to buy the equipment such that when it arrives to us, we are able to put it where it is needed immediately. And so things like the infrastructure buys are going to be delayed until the last moment possible, such that as we are installing it and taking advantage of all technological advancements prior to that buy or that purchase.

Senator SCHATZ. So, I just want to be clear. I am not criticizing you for spending slow. I am asking that we get better fidelity into what the spend plan is so that we know—because part of it is just as simple as, "Hey, we don't want you to waste money just to satisfy our need to feel like you're on your plan." But on the other hand, if you are delayed, you are delayed. In which case, we ought not to appropriate money that can wait until a subsequent fiscal year.

So all we need is better communication as it relates to where you are exactly.

Mr. WINDOM. Yes sir.

Senator SCHATZ. And not waiting for either an oversight hearing or these 90-day quarterly reports, which my staff tells me, you know, does not quite tell the picture. Especially when you are launching, 90 days is a really long time to wait to figure out where we are at.

Final question, a lot of people have expressed concerns that private individuals have played in the VA procurement decisions and there are lots of very good people in leadership and at the line level who want to do this right. And I have no particular reasons to suspect that anybody is doing otherwise.

But here is the question, besides workshops, council meetings, site visits, and other routine and related community events, have you or anyone you know formally or informally corresponded with any private individual not officially involved with the EHR modernization through a contract for services or provider agreement? Mr. Byrne?

Mr. BYRNE. I am not aware of anybody doing such things, sir.

Senator SCHATZ. Okay, I am going to reduce this question to writing, because I do not want to put any of you on the spot, and I want you to get it exactly right.

This concern that there are three private individuals who meet at a private club, who have improper influence over the operation of the Veterans Administration is a first order for scandal, if it is true. And we want to get to the bottom of that particular question. I know there is going to be, I believe, a GAO study, but I also trust you to answer the question as straightforwardly as possible. So we will, in a non-accusatory way, reduce this to writing so that you can clear up who, if anyone, is being influenced by these three private individuals who, at least reportedly, have outside influence at a Government agency.

Thank you, Mr. Chairman.

Senator BOOZMAN. Senator Capito.

Senator CAPITO. Thank you, Mr. Chairman. Thank all of you. Appreciate what we are trying to accomplish here, and I would say way overdue in time, and we want to see this be successful.

So Cerner is the main contractor. Obviously, they are letting subcontracts to small businesses, which is required through the—complying with the subcontracting plan, one of those happens to be in my state. So I would like to know if anybody can give me some data as to whether they are fulfilling the 5 percent subcontract to small businesses, if Cerner is moving forward on that. And what kind of feedback you are getting from them in terms of moving some of that business to our smaller businesses?

Mr. WINDOM. Yes ma'am. So we have a 17 percent overall small business set aside plan associated with the work that Cerner has been assigned, which equates to about $10 billion. The breakout of that is small disadvantaged businesses, 5 percent women-owned businesses.

Senator CAPITO. Right.

Mr. WINDOM. Five percent up zones, 3 percent and so on. So as you know, the oversight mechanism is what is important. And I can tell you, my Program Management Oversight Office is very much attentive to Cerner fulfilling those established goals. Over 10 years, that equates to anywhere from $500 to $600 million, and that is assuming at the present level. And so, we have the ability to not issue task orders if Cerner is not fulfilling those goals. So the task orders that we have issued today, Cerner has been meeting those small business objectives.

Senator CAPITO. In all categories?

Mr. WINDOM. Toward 17 percent. Keep in mind, ma'am, is that there is overlap between the 17 percent, in that you can be a small disadvantaged business and also be a woman-owned business, et cetera. So, ma'am, across the categories that we have established, they are in compliance, and we will continue to ensure that this is the case.

In addition, as an aside, we are having in the spring, a vendor day, if you will, where Cerner is going to be hosting vendors that are interested in showing their expertise, their talent, their abilities to support our overall mission objectives as a proactive measure to ensure that we remain in compliance and can continue to leverage good ideas that small businesses, in fact, have.

Senator CAPITO. Yeah, I would appreciate having the date and—

Mr. WINDOM. Yes ma'am.

Senator CAPITO [continuing]. And maybe you could generate all of that to our offices. Certainly as somebody whose proximity to the D.C. region, my state is fairly close. This could be helpful, but it would be helpful in Hawaii as well.

Let me ask you something. Cerner is developing, I am sure, on the other side of their non-governmental business, proprietary products and other things for their private businesses. Is there any concern that with a contract this large that the firewall between developing proprietary products and the Government products, in other words, I do not want to see them developing their proprietary products on our Government tax dollars. What would you have to say? What kind of firewalls do you have in place for that?

Mr. WINDOM. Ma'am, I think you will find our strategy supports the removal of the intellectual property barrier. It from—I cannot speak for Cerner, but it is—they seek to maintain a single base line between their commercial and their Federal business.

I can tell you within the terms and conditions of the contract, we put clauses in there that address the fact that we will continue to help them innovate and hopefully we will be introducing ideas as part of, you know, if you will, our smart people that reside within the VA. Helping them understand, not only our market but contributing to ideas that may support their commercial market.

Within the framework of the terms and conditions of the contract, we have, actually language that allows for the sharing of potential profits that may be gained by those ideas.

Senator CAPITO. That was going to by my next—

Mr. WINDOM. So yes ma'am. So I think the cross-pollination between the commercial and also the Federal space are important to preserving that commercial desire to be more like the commercial EHR platforms. So we have not faced those inhibitors, to date. But we will be mindful of them, especially since you have expressed that concern, but I think we have got language in the contract. And again, enforcement is important to where we are going to be able to cross-pollinate, share ideas, and then the Government reap whatever benefits they so need.

Senator CAPITO [continuing]. Good. Let me ask this. I do not have much time left. This is a big question. In terms of putting electronic medical records into the private space and where we are doing this now with the VA, there has been an issue with providers—maybe I will say, since I am in that category, older providers who do not really want to, you know, move into the electronic medical records. It is expensive. They do not really know the technology. They do not want to mess with the technology. You said something, just a bit ago, about cross VA and how—it led me to believe, like this is going to be a requirement for everybody across.

Are you going to be training through the spectrum? It is not just going to be physicians. Obviously, it might be physician's assistants, physical therapists, et cetera, et cetera. Am I understanding that correctly?

Mr. WINDOM. Yes ma'am. There are many other types of users besides clinicians.

Senator CAPITO. Right.

Mr. WINDOM. And so that whole user base is important for our overall success. And so, ma'am, if you do not mind, I am going to defer that do Dr. Kroupa, because she is at the forefront of these clinical or these change management councils that are supporting those.

Dr. KROUPA. So we have one advantage. We have been using electronic health records for many years, but we are not going from paper to an electronic health record. So everybody is used to being on a computer. But we have a robust training strategy and change management strategy to bring everyone to this new technology.

Senator CAPITO. Great, thank you. I will just make a quick comment since Senator Baldwin and I work on this issue with the prescription of opioids and overuse and lack of accountability through the VA. I am certain that this will help, but if it is only if everybody is doing it the right way, cross VAs, cross your sea box and everything. So I encourage you that.

Sorry I went over. Sorry.

Senator BOOZMAN. Senator Tester.

Senator TESTER. Thank you, Mr. Chairman. I want to thank you and Ranking Member for having this hearing. I welcome all the cofolks on the panel.

Before I get into my questions on EHR modernization, I have a couple of things I just want to hit on very quickly. Yesterday, members of Congress charged with oversight of the VA's policy in funding, including myself and the Chairman and Ranking Member of this subcommittee.

Sent a letter to the Secretary with a simple message that the VA needs to be more transparent. And the VA needs to work more collaboratively with Congress. I hope there are not folks within the VA that see us an enemy, because we are not. Our job is oversight, and if in fact, there are folks within the VA that think we are an enemy, then they need to change their opinion.

We have got a lot of work to do, and we can get a lot of work done by working together, and I hope you folks agree on that. And let me give you an example, the Access Standards. I do not know anybody in Congress that knew what was in those Access Standards before they were announced, okay. Maybe one person. It has impacts on appropriations. It certainly has impacts on the Authorization Committee. And quite frankly, a better job should have been done in that regard. Why, because ultimately what we are talking about is that Dartmouth Report that you talk about, Mr. Byrne. Where the VA does have good healthcare and the Access Standards are bad or have unintentional consequences. It could result in privatization of the VA.

So secondly, last week the Federal Court of Appeals ruled that territorial seize should be included in the definition of the service of the Republic of Vietnam. This is the Age in Orange Act. The Age in Orange Situation.

Mr. Byrne, does the VA intend to appeal this ruling to the Supreme Court?

Mr. BYRNE. So these types of matters are handled by the Department of Justice in consultation with us.

Senator TESTER. That is right. You will be the driver. They will have to do the work.

Mr. BYRNE. That is correct, sir. And so we are taking that under advisement right now on what our recommendation is going to be.

Senator TESTER. So a decision has not been made yet?

Mr. BYRNE. Correct.

Senator TESTER. Okay. Mr. Byrne, it is no secret that making joint decisions and balancing priorities with the agencies, the size of the VA and DoD, which are very significant, is a challenge. Yet, we are only a year away from the first roll of the new EHR at the VA and no one has been designated as the ultimate decisionmaking authority between the two agencies. The Secretary committed back in September to create a joint Government structure. It still has not happened, and we have known since the Cerner contract in May that this process will be impossible without an entity at the top, the food chain to make final decisions.

I understand there will be an upcoming report laying out some of the joint governance options, but we have not received any commitments about when there will be a final solution. In the mean-

time, important decisions are being made without formal interagency structure, and more importantly, many decisions are being kicked down the road, because there is nobody in place to make them.

Senator Reid and I recently sent a letter to both agencies, because we are growing increasingly concerned about the impact that this is going to have on the success of this project. So tell me where we are at in this process and explain to me why this committee should not be concerned about what I just described?

Mr. BYRNE. So sir, we do have a governance construct in place, an interagency program office that is working. We have asked DoD Tiger Team—VA Tiger Team to work together to determine whether there is a better solution going forward for the long term. At the end of February, we will receive a report out from them on what they think the recommended course of action will be regarding some type of a joint or interagency organization to supplant or take over for this IPO office that is existing right now, allowing us to move forward undistracted to implement at the IOC sites.

The agreement between the two Secretaries, then General Maddox and Secretary Wilkie was a 50,000-foot agreement.

Senator TESTER. Yep.

Mr. BYRNE. I can tell you that on a more operational level, I work with the acting Under Secretary over at DoD on the joint executive council. And ultimately, we are the decision makers if there is a dispute that cannot be resolved at the lower levels between DoD and the VA.

All of us have agreed, despite any rumors that are out there, that we would like to consider the option, and we are looking forward to the recommendations at the end of February to have one arbitrator, whatever the title, a purple person, who we all agree would make decisions, whether it is a dispute between DoD and the VA. And that is a purple person, though. Not somebody from DoD. Not somebody from the VA.

Senator TESTER. Yep.

Mr. BYRNE. And the example I have used would be—this is a bad example, but it is like a marriage. You give 90 take 10.

Senator TESTER. So when is that purple person coming on board?

Mr. BYRNE. Well, we are looking for the recommendation.

Senator TESTER. Yeah.

Mr. BYRNE. That that is the right solution. And we are still seeking names and looking for that person right now. So we do not even have the—if that is the idea we choose. If that is the construct that we are going to use going forward, we have not decided on that person yet. We have not even interviewed them yet.

Senator TESTER. So—and I will put the rest of my questions in writing for the record.

But my concern is DoD—VA's no small partner, here. It is big, but DoD can steamroll VA if they want.

Mr. BYRNE. I do not agree with that, sir.

Senator TESTER. Well, I hope you are right, but they have been down the road. So I think they have some experience that the VA does not have, that they could say, "You know, we know better than you," and unless you have somebody who is able to look at it from both perspectives, because it is critical. Just one final thing,

and it will be very quick, Mr. Chairman. When does the VA intend to determine whether they are going to appeal the Blue Water Navy issue?

Mr. BYRNE. So the DOJ has 90 days, I believe, to submit their package from the Solicitor General to the Supreme Court, and I am not sure exactly what our deadline is. I probably should know that, at the 45 or 60-day point. We have to put for what our recommendation to DOJ.

Senator TESTER. It would be really good to get some clarity on what is going to happen, here, because as you know, we almost had a Blue Water Navy Bill at the end of last Congress. We did not. This will have an impact whether we are going to move forward or not.

Mr. BYRNE. Yes sir. Thank you.

Senator TESTER. Thank you, Mr. Chairman.

Senator BOOZMAN. Senator Daines.

Senator DAINES. Thank you, Mr. Chairman. I am honored to join you and the members of the Mil-Con VA subcommittee for the 116th Congress.

The topic of today's hearing is timely. When I met with Robert Wilkie last summer, he shared a story about his father's service in Vietnam. The indorser's father incurred, the years he spent carrying around reams of paperwork to get treatment at VA facilities. As a son of a Marine myself, I appreciate the unique challenges that our service members face.

Today we are reviewing a plan to create a viable, electronic health record system at a cost of $16.1 billion. That is with a "B" over 10 years. I spent years in the cloud computing, Novell software business data integration and so forth and had a fair amount of experience in this. Frankly, $16.1 billion, when I look at it, is a lot of money. I appreciate the witnesses' time and optimism, but I think these numbers demand some scrutiny.

Mr. Byrne, you pointed out that new Office of Electronic Health Record Modernization emphasizes transparency. As a Senator from Montana, my first question in preparing for this hearing was simply, when will Fort Harrison go live? I cannot find this information on the VA's website nor any public facing outlet.

Furthermore, VA documents provided to the committee show conflicting information. One schedule showed fiscal year 2020. Another showed fiscal year 2027. Mr. Byrnes, when will Montana veterans be able to use a modern electronic health record system?

Mr. BYRNE. Well first, sir, I am glad that you are excited about this being rolled out in your state. I believe there is a roll out schedule. I just do not know it off the top of my head, and unless Mr. Windom does, we can take that for the record and get it back to you.

Mr. WINDOM. Sir, I will have to take it for the record. We do have a full deployment schedule that reflects the 10 years of the 9 years, 6 months, that does, in fact, capture Montana, the great State of Montana. And we can tell where your facility lies at that and so I will take that for the record.

Please, the terms and conditions of the contract has an agreed-to a deployment schedule. We will make sure your staff has that, sir.

Senator DAINES. I think transparency is really important here. Especially in light of the huge amount of money being spent as well as the importance of this project here to help our veterans. So I look forward to that response.

Last month, the GAO released a report finding the VA spent $1.1 billion over 5 years on two previous attempts to update its health information system. This latest effort by VA is expecting to cost upwards of $16 billion over 10 years. I am just skeptical. I have watched in the days of the private sector, particularly, in the public sector, as well as private companies but spending huge amounts of money. Anytime I hear about 10-year roll outs in project timelines, consider me in the camp of skeptical. We can spend a lot of money, and by the time something gets implemented after that long period of time, oftentimes it is obsolete from the day it goes live.

Mr. Byrne, you noted that, "With congressional support, the VA has been able to been able to stay on track." In its report, the GAO stated the VA must work expeditiously to reach its goal. My question is, is 10 years an ambitious timeline, and would you describe the VA's efforts as expeditious?

Mr. BYRNE. So 10 years is a long time, sir. And I appreciate that. And the technology that we are starting with in the Northwest will be different than those roll outs later on in the deployment schedule. What I will share with you—what I am looking forward to, has a big metric, is a big decision maker, has some visibility into where we are, is the roll out of the IOC sites in Washington State. Up in Spokane and Seattle and Tacoma. How those are rolled out. Deficiencies we have learned from those. The challenges we learned from those are going to give us a picture of how much this is actually going to cost.

And so for us to guess—we are guessing right now on the amount. I think it is an educated guess, but after the IOC rolls out, I believe we are going to have a much clearer picture to then be able to address your question more specifically.

Senator DAINES. So I am running out of time. I am going to follow up with Mr. Windom. If the idea behind this initiative is to leverage "commercial best practices," where in industry, do we see software solutions being introduced over a 10-year horizon?

Mr. WINDOM. Sir, I think it is important to understand that the signing of the contract is a static document for a very dynamic environment. And so, we will continue to evolve with the commercial product. Things like cloud computing that you mentioned, definitely something that is on the horizon. You know, when you put a mechanism in place, you challenge me to manage cost, schedule, performance, and risk. And so, I will continue to update you on our strategy moving forward, but the vehicle we have in place, the IDIQ, indefinite delivery, indefinite quantity structure will allow us to take advantage of the technological advancements. So what the product looks like today in year one, may look like something different in year nine, but it will be interoperable, and I think that is key.

Senator DAINES. It may look different two quarters later, at the state of technology.

Mr. WINDOM. Yes.

Senator DAINES. And lastly, I will make a comment. We used to say as we working toward—and any time these great big enterprise solutions are put in place like this with a 10-year time line and $60 million dollar-price tag, that is a recipe for disaster. It is a recipe for, frankly, not spending tax dollars wisely, but the people that are hurt the most are our veterans here who will not see a timely implementation here. As we say, these great big erector set, kingdom building with an IT organization. Systems like this, they are dinosaurs.

Mr. WINDOM. Yes sir.

Senator DAINES. They just do not know they are extinct yet. Thank you.

Mr. WINDOM. Sir, may I comment, and that is why IOC is so important. Secretary Behr indicated that it is that bite of the apple that is a manageable bite that will be allowed to assess what efficiencies can be gained. I can assure you, Cerner wants to go faster. It is our implementation, ensuring we employ the appropriate change management strategies to ensure the embracing of the user that is important. So sir, we will be pushing to go as fast as we can, and I can assure you, under my watch, we will be incredibly judicious.

Thank you, sir.

Senator BOOZMAN. Senator Baldwin.

Senator BALDWIN. Thank you and I want to thank you Chairman Boozman and Ranking Member Schatz for holding this hearing. Thank our witnesses for being here.

The Wait Time crises that was brought to light in 2014 really revealed tragic deficiencies in caring for our nation's veterans and the need for modern and functioning scheduling system at the VA. And 5 years later, I am fearful that we are not closer to a solution.

Mr. Byrne, is the VA currently operating a Cerner scheduling program in any VA medical center?

Mr. BYRNE. I am concerned to answer that question. I know there is an intent to do so. Rolling it out simultaneously with the overall roll outs of the EHRM system, starting with the three locations in Washington State. We are also rolling out this portion of the suite of options offered by Cerner. And so, I know we are intending to.

Senator BALDWIN. Is the answer no?

Mr. BYRNE. I am not sure. I can ask.

Senator BALDWIN. When will a pilot Cerner scheduling module go live?

Mr. WINDOM. So ma'am, the answer is no to the Cerner Millennium Scheduling Suite. We have deployed separately in Columbus, Ohio, an EPIC-based solution. We have committed to deploying a Cerner scheduling module out-of-sequent post IOC, and the intent is to leverage the learnings of IOC to deploy, if you will, out of the vessel suite solution, simply the scheduling module.

Senator BALDWIN. So what is the tentative date that a pilot Cerner scheduling module will go live?

Mr. WINDOM. So I would, by itself, so within the framework of the best of suite March of 2020.

Senator BALDWIN. March 2020?

Mr. WINDOM. Post March 2020.

Senator BALDWIN. Okay, when will the Cerner scheduling module go live nationwide?

Mr. WINDOM. The nationwide is 9 years and 6 months from that point, because nationwide means incorporating all the medical centers, and so that would be at the end of the deployment timeline.

Senator BALDWIN. And so 9 months or 9 years and some months after March of 2020?

Mr. WINDOM. That would be the total solution, deployed nationwide to all VA facilities. The scheduling piece, alone, our intent is to deploy the scheduling piece separately to the appropriate facilities. The timeline for that has yet to be fully fleshed out, because we have not developed fully, our execution strategy, but we expect that to start shortly after we achieve IOC milestones in March of 2020.

Senator BALDWIN. What is the total cost for the Cerner scheduling to go live nationwide?

Mr. WINDOM. Ma'am, those estimates are rough-order magnitude right now. In the coming months, we should have the full profile of our execution strategy built out, and we will gladly come brief you or your staffers on that full profile.

I think—what I would like arrange.

Senator BALDWIN. What is the range?

Mr. WINDOM. Pardon me?

Senator BALDWIN. What is the rough range?

Mr. WINDOM. Ma'am I would not even offer you a rough estimate, because it is important, in hearings like this, to be accurate. And so, in the coming months, we will have that full profile for you.

Senator BALDWIN. Last week the Secretary announced proposed access standards for veterans seeking care in the community and there, once again, tied to wait times. Last week, the VA also announced that it was canceling the medical appointment scheduling system that you just referred to, the mass pilot project deployed at the Columbus VA Ambulatory Care Center.

Here are some of the results of that pilot: There was a 30 percent improvement in primary care wait times. An 18 percent improvement in behavioral health wait times. 30 to 50 percent reduction in the time required to schedule an appointment by a scheduler. The mass pilot allowed schedulers to schedule across VA medical centers and into specific departments without multiple phone calls and faxes. This is not possible to do today. For VA medical centers that are using the Legacy VISTA scheduling system.

So Mr. Byrne, will this higher level of functionality be required under the Cerner scheduling model?

Mr. BYRNE. Yes ma'am.

Senator BALDWIN. Okay. Will the Cerner model allow VA schedulers to schedule outside of the VA?

Mr. BYRNE. Yes ma'am, community care.

Senator BALDWIN. In fiscal year 2019, the subcommittee included report language that required the VA to report back on the status of the scheduling system component.

VA notes in its response that will not implement any of the existing scheduling pilot programs and will instead go with the Cerner scheduling solution, and the response says, "VA believes that there

is a return on investment in productivity and efficiency realized by accelerating this scheduling system." Now that is a really great statement, but I would like to see some of the metrics attached to this conclusion, this statement. So I asked the VA to provide the actual data and metrics used to justify that statement.

Another statement made was, "This will improve access for veterans and streamline workflow for staff." Since no VA medical center is currently operating on a Cerner scheduling module, I am not sure how the VA can make such a statement. And so I would like you to provide the committee with metrics and actual data on how this decision will improve access for veterans and streamline the workflow for staff.

Almost 5 years after the scheduling problems at the VA came to light, the VA is telling Congress that veterans are going to have to wait another 5 years or more for nationwide deployment of a modern scheduling system. A system that VA has not tested and does not know the capabilities of.

In its report to this committee, the VA says that we should trust this new solution and that it will provide improved access to care and streamline workflow for staff. I have to tell you, I am skeptical, and I would like to hear those answers from the VA. I think our veterans have waited too long, and we have spent over $30 million on a cancelled scheduling pilot that showed tremendous progress and promise. And now we are being told cost will not change, but resources will be needed sooner. And somehow, this is going to lead to better outcomes for our veterans. So given the track record, I am highly skeptical, and I hope that you will be able to provide some answers that elaborate on the conclusions that you gave on in your report to this committee.

Senator BOOZMAN. Senator Collins.

Senator COLLINS. Thank you, Mr. Chairman. And thank you for holding this hearing on this very important issue.

This modernization effort is incredibly important. I do not need to tell the witnesses who are here that fact. It should mean a great improvement for veterans in the State of Maine, once it is finally implemented nationwide. And I cannot emphasize enough how important it is that we get this right. So that Mainers and others who are leaving the military and going into the VA system have a seamless transition. I have never understood why we had different electronic medical record systems in the first place, and I am glad we are finally acting on that. We also need to make sure that in addition to the seamless transition between the DoD and the VA that there is interoperability between the Togus VA Hospital in the State of Maine, the oldest VA hospital in the nation and community providers, because there is only one VA hospital in Maine. And a lot of veterans get their care at community-based clinics or through what used to be known as the Arch Program in northern Maine.

So one of my questions is when DoD encounters a problem implementing the new electronic health record systems and comes away with lessons that might be helpful to the VA, how are those lessons learned? What is the system for ensuring that, that is transferred to the VA or vice versa, Mr. Windom?

Mr. WINDOM. Ma'am, we have had an ongoing relationship with DoD since day one. Those lessons learned are not only physically captured in a database, but they are addressed individually with mitigation strategies to prevent us from, if you will, duplicating elements that may have been challenges that they faced. And so, we have got, not only a database associated with that, we have an ongoing interchange a monthly, all-day interchange with DoD to share ongoing progress. A weekly interaction with DoD and VA to exchange weekly interactions. So I think we are getting to that in a number of ways, and we also have workshops that DoD is participating in as part of our clinical workflow development process that I will defer to Dr. Kroupa to touch on.

Dr. KROUPA. So we have 18 councils that are made up of VA clinicians from across the country. They meet on a regular basis over the next eight to 9 months to design and build and configure the Cerner product for VA. We have DoD representatives on each of those councils who participate in the both online and in-person workshops to help us understand why they made the decisions they made, the consequences of those, and to work together to build the system.

Senator COLLINS. Thank you. Mr. Byrne, as DoD works to overhaul its electronic health records system, I was chagrined to read a Bloomberg story that reported that DoD had discovered cybersecurity vulnerabilities. Now the good news is that these vulnerabilities were discovered by a team of military hackers and IT specialists. But the test conclusion is very disturbing, because it was that the system was not survivable when hit with staged attacks.

As a member of the Senate Intelligence Committee, we are dealing a lot with cybersecurity issues, and I am well aware of just how vulnerable our Government systems and private sector systems are. And here we are having this huge merger of two enormous Departments that are going to have very sensitive, personal information, plus identifying information. How will the VA go about identifying and addressing cyber vulnerabilities in the new system?

Mr. BYRNE. So ma'am, what I can answer to you on that is that we have a new CIO, Mr. Jim Gfrerer, and his strength, I believe is in cybersecurity. Not that that is relevant, because he is leading a very large organization. And I will have one comment, and I am going to ask Mr. Short, who I know, in fact, I heard him give the answer the other day much better than I could to address your question. But the Red Team at DoD is the best of the best. And so, I do not know that they are penetrating the environment necessarily means it is not a robust defense, but I am not an expert. Mr. Short is. And if you are okay, ma'am, I would like to kick it over to him.

Senator COLLINS. Absolutely, but I would just say that, believe me, there are a lot of foreign actors who are also very, very capable in this area.

Mr. BYRNE. Yes ma'am.

Mr. SHORT. Ma'am, I reviewed the DoD report before it came out in the press and spoke with DoD about it. The good news is, every month since MHS Genesis, DoD's name for the new EHR has gone live. Every month Cerner has drove down the vulnerabilities that

DoD discovered. So every month, the number of vulnerabilities in the system keeps going down, because Cerner's improving the system. Cerner has also moved all their platforms, even on the commercial side, to using this a standard setting for all security, improving all the security platforms. So DoD's conclusion, in discussion with me is, this was a good thing, because our team found it. We expect DoD Red Team to always get in to any system they go after, but the good news is that every day, Cerner is reducing those vulnerabilities and DoD feels confident, as well as I do, that we are safe.

Senator COLLINS. Thank you, Mr. Chairman.

Senator BOOZMAN. Senator Udall.

Senator UDALL. Thank you very much, Chairman Boozman. Thank you, Ranking Member Schatz for pulling together on this, because this, I think, is a crucial issue to really helping veterans right on the line every day. It was good to hear, Dr. Kroupa, that you said that the clinicians are going to be actively involved in coming up with a system. I hope that you will inform your new CIO about that, because he said recently, James Gfrerer, now the VA CIO said in his confirmation hearing, "Clinicians, clinicians," he said, "Will have to go through a substantial, rigorous process to conform their workflows to the IT systems." To me, that is backwards. The clinicians should be driving the process, and so I hope that with what you have said, that that is the direction that we are headed.

But my question today, Mr. Byrne, last year members of Congress called this transition process "deteriorating and rudderless." The rising cost underscore that the administration did not start this process with a clear view of what would be required. That is unfortunately a particularly acute example of what is a Government-wide problem with upgrading IT systems.

Senator Moran and I were actively involved in passing (FITARA) Federal Information Technology Acquisition Reform Act and the Modernizing Government Technology IT Act. Does the VA plan to use the newly authorized working capital fund to reprogram their IT budget to fund this modernization project?

Mr. BYRNE. So if I may, I would just like to address one quick matter you had addressed. Our CIO, during the confirmation hearing, making a particular statement about clinicians. And if you were to ask him that same question again, I think the answer would be very lined up with Dr. Kroupa.

Senator UDALL. Oh, good.

Mr. BYRNE. He is a good man and we are very, very fortunate that he is on board with our team. And sir, I have to tell you, I do not know the answer to your question, and I am hoping one of my colleagues up here knows the answer about the working capital group.

Mr. WINDOM. Senator, I think that is a CIO's call on how he is going to employ the new policy or law regarding FITARA. I can tell you that OEHR adheres to the existing structure of FITARA that the CIO has approval authority on our expenditures, and we have the appropriate interactions with them in advance of obligating monies.

I think that Congress has been very clear to me with regards to the accounting of EHRM expenditures, and they do not want that money co-mingled with other IT investments. But I can tell you from our joint infrastructure strategy that we worked hand in hand with OIT to develop—we are exchanging ideas. We are cross-pollinating. We both understand our fiscal responsibilities and have no desire to waste taxpayer money on not being aligned.

So we are doing that. And sir, I will talk with the CIO when I return. But I think that question is likely in his corner.

Senator UDALL. Okay, well I am going to submit that question for the record and hope that you get me back a thorough answer with regard to the working capital fund. Because I think when you are doing such a big project, you are going to need those kinds of dollars, and I would be happy to hear what you say.

Senator UDALL. Mr. Byrne, just a final question and really, it is more of a statement but I have a pending request to meet with Secretary Wilkie. Unfortunately it has been pending since July, and I have heard from other members that have similar difficulty meeting with VA leadership. I would like to ask you personally to commit to being responsive, but also that you would advise the Secretary to respond to our congressional request. Would you please do that? Would you commit personally today to be responsive when we have requests of the VA administration and the leadership?

Mr. BYRNE. Yes, to both your questions, sir.

Senator UDALL. Okay, thank you. Thank you both. Appreciate it.

Senator BOOZMAN. Thank you. Let me just ask a couple of more things. Dr. Kroupa, Mr. Byrne talked about the importance of the roll out as we go forward. DoD, I think they would agree, we would all agree that they stumbled a little bit. Maybe a little bit more than a little bit with their roll out. You are doing your councils and things like that. I guess, my thought is, it is one thing to do them, but we really do need to listen to the problems that are coming up with the specialties and things. Reassure us that that is happening.

Dr. KROUPA. So even before the contract was signed, we started talking to DoD about their experiences at all levels of the organization. As I mentioned, we have our clinical councils which are made up of both national program leaders and people from the field who have a lot of experience with electronic healthcare records. Many of them use electronic health records at their academic sites. So it not just VA expertise.

We have brought DoD folks into those councils so we could hear firsthand from them. So after the national workshops, we take it to the local sites, our IOC sites, so we have a week in Kansas City where our clinical councils are working together. Then we take it to the local sites where the folks in Spokane, in Seattle, they can actually see what decisions have been made and say, "Yes, that's going to work for us, or no, no let's tweak this. Let's change that, or we have a question about that." So in doing that, we are not only configuring it and designing it, but we are also educating our users of what is going to happen so that they can anticipate and participate in the challenge.

I think we also have industry best practice advisors on the councils. These are folks from various academic and centers that have

rolled out large integrated electronic health care records, to advise our council chairs on some of the pitfalls and problems that they might run into.

Senator BOOZMAN. Very good. Another issue I think you have heard discussed at length today is the scheduling. And 10 years is too long. You are going to have to figure out a way to do that much more rapidly with the new access standards that have come out which will help veterans.

One of the things that we are being told by VA is that efficiencies in the VA systems will help pay for that, because we are going to become more efficient. The way that you do that, the critical way that you do that is through scheduling. Senator Baldwin, you know, talked about the efficiencies that were gained, and you are choosing the system that we do, but we simply have to have those efficiencies, and we have to have it in a timely fashion for our mission to work and for it to be affordable.

So that is something that we are going to have to, I think, push really hard. I think we are all in agreement on the committee, that again, a 10-year reprogramming, that is just simply unacceptable.

Mr. BYRNE. So I will make a comment on that scheduling solution, and I will ask John and company to correct me if I am wrong, but my understanding is, it is going to be well before 10 years that this scheduling solution will be across the United States, will be in every medical center in the United States. We are doing a dual effort as the EHRM rolls out within the various medical centers, we'll, of course, implement the scheduling solution. But there is a separate effort in other locations to do the same. So I will not say that it is going to be in 4 or 5 years, but that is probably more likely than, certainly the 9 years, right?

Mr. WINDOM. Yes sir, that intent, Mr. Chairman. The scheduling again, IOC is our testing platform, if you will. And we intend to get scheduling out to our veterans as soon as we possibly can. The commitment is the reason the return on investment was what it is we paid for the Cerner licenses.

And so, in promoting interoperability objectives, installing two different systems, we would, in fact, complicate that interoperability objective. So I think we have got a plan. It is being refined over the next 3 months including what the cost profile looks like, what the timing of the deploying scheduling is and look forward to coming back and updating either you or your staff, sir, on that progress. I can assure you we have the same concerns that you have, sir. And we are going to address them and be able to formally present that to you, the plan.

Senator BOOZMAN. Good. No, we appreciate that. The last thing and Senator Tester alluded to this, General Maddox, Secretary Wilkie, you know, got together and said we are going to do this, made this statement. And we are all patting each other on the back. The reality, though, is that somebody has to be in charge. We have to have an organizational flowchart as to how things are decided.

We have all been around governance for significant years and simply, that will bog down tremendously. So what we would like for you to do is provide an update on joint oversight, how this is going to work, including the organizational structure and account-

ability mechanisms that facilitate, consort, coordinated decision-making oversight, and we really want that like soon. That should already be in place. I doubt that it is, and I am not really being critical about that, but it is a necessary function for us to go forward efficiently. And we are going to push really hard to see that, and if not, you are going to have to come back here and explain why it is not being done.

Senator Schatz.

Senator SCHATZ. Just following up on the Chairman's last request. Do you already have this? An organizational chart that clarifies who does what?

Mr. WINDOM. Sir, we have an existing governing structure that is supporting us today. The more efficient, more agile governing structure that you are speaking to that identifies, if you will, that single belly button, that single point, that is part of the assessment that is ongoing.

I can assure you that we are working hard, daily, to gain joint efficiencies, joint process improvement.

Senator SCHATZ. Right. But do you know—I mean the question he is driving at, right, is push comes to shove, who is in charge? Do you know the answer to that question?

Mr. WINDOM. Sure, push comes to shove, who is in charge, the Deputy Secretary is in charge. I am a 30-year naval veteran, sir. And so, I relish that single person to ask. One thing I would like to highlight is that governance is working at the lowest levels, and which is where it has to work. I can tell you, there is very few issues on the table that are immediate with regard to that person being in the seat, and we have not hit critical path on any of those decisions yet. So we are very—we want that mechanism in place with letting the assessment team flesh out, if you will, all the buckets of consideration that have to take place.

Senator SCHATZ. Okay.

Mr. WINDOM. And so we look forward to that reporting out on that.

Senator SCHATZ. Mr. Byrne, being general counsel for the VA is a full time job?

Mr. BYRNE. Yes sir.

Senator SCHATZ. When are we going to get a Deputy Secretary nominee so we can relieve you of one or the other of these duties?

Mr. BYRNE. I do not know how to answer that, sir. That is up to the President and Mr. Wilkie, the Secretary of the VA to determine. And, of course, with the consent of this body.

Senator SCHATZ. Okay. Let us talk a little bit about VISTA's sustainment. Obviously, you are going to be making a transition and some of these are operational questions. I know, Mr., Windom, that you will reassure me that there will be no operational glitches. I guess, the question is, since some of these are really moving targets, does some of these slide appropriations either to the left or to the right, depending on how long you have to keep VISTA sustained, you know, this can get a little clunky as you are launching to maintain sort of seamless experience from the customer side. So that part we have not really talked about and how it could impact the need for appropriations, either positively or negatively.

Mr. WINDOM. Sir, again, you have entrusted me to support our veterans. We are not going to prematurely turn things off.

Senator SCHATZ. I do not think you are going to do anything stupid.

Mr. WINDOM. Thank you sir.

Senator SCHATZ. We are satisfied that you are trying to make the right choices.

Mr. WINDOM. Yes sir.

Senator SCHATZ. What I am not satisfied about is that you are going to tell us as we go along so that we can make appropriations that are dialed in, right. So that we give you enough runway to make smart choices.

Mr. WINDOM. Yes sir.

Senator SCHATZ. We do not penalize you for not spending, you know, one fiscal year's money. And we do not put so much political pressure on you that you do a dumb thing, but we still need better fidelity from the standpoint of our staff's ability to do a markup that does not appropriate money into a pile.

Mr. WINDOM. Yes sir.

Senator SCHATZ. So that is the part I want you to get a little bit clearer with our staff about. We get that there will be a transition. We get that VISTA has to be operational all the way, really until the end, at least portions of it. We want to know how much more or less that may cost.

Finally, there were reports last fall on the condition of IT infrastructure in the Pacific Northwest. Pilot sites to try to figure out whether you had the IT infrastructure to roll a new system out. Were there shortfalls in IT infrastructure and from a planning standpoint and the standpoint of this committee, does that indicate something system wide that we should be planning for? Or is that all baked into the 10 odd billion that we are planning for?

Mr. WINDOM. Sir, I am going to make a quick statement, then turn it over to John Short. First of all, the carryover from fiscal year 2018 allowed us to cover what we perceived to be about a $70 million-dollar expenditure for infrastructure upgrades that were on plan. Things like user devices and things like that. We have been working hand in hand with the CIO such that there is a joint strategy, such that, we are going to be able—

Senator SCHATZ. Yeah, but let me stop you there. You have a $200 million carryover, I think?

Mr. WINDOM [continuing]. Yes sir, $203 million, yes sir.

Senator SCHATZ. $250?

Mr. WINDOM. $203.

Senator SCHATZ. $203, okay.

Mr. WINDOM. Yes sir.

Senator SCHATZ. You have a $200 million carryover and part of that is like contracting delays. So out of the presumably it was $270, you spent $70 to deal with IT infrastructure, but it is not like you found savings. You just moved money to the right on your appropriations schedules. So the question is, on a year over year basis, are you able to absorb the needs for new infrastructure, or are you just pushing this out to the right, and as you delay contracting and cumbering money and all the rest of it, that you sort of book that in the current year end savings, plow it into infra-

structure, but we are going to be left with a two or three billion-dollar infrastructure bill on the back end.

Mr. WINDOM. Well sir that is why I think it is important that the CIO and I have an incredibly cooperative effort. Again, he has a budget that supports maintaining infrastructure today. Our funding supports the installation of the Cerner Millennium Solution. So those have to work hand in hand.

Senator SCHATZ. But the question is, you do this analysis of the Pacific Northwest.

Mr. WINDOM. Right.

Senator SCHATZ. It tells you what you need. Presumably, you can do some back of the envelope and say, "Well this is x-percentage of our system. We should probably multiply that by whatever and figure out whether the number we have for IT infrastructure upgrades, you know, sort of rhymes with what we now have some hard numbers that can extrapolate." So the question is, have you done that, and does it look okay?

Mr. WINDOM. Sure, we are doing that as part of—as OI and IT creates its budget, they are incorporating the challenges that we are finding with regards to what infrastructure upgrades. We have the ability to go out and do current state reviews and we are out in front of our deployment efforts that we are identifying those costs, if you will, early. And we intend to report those out.

Senator SCHATZ. So the answer is, you actually do not—I do not mean this as a criticism. The answer is you do not know the answer to that.

Mr. WINDOM. The answer is we have not been to every site to assess what deficiencies may exist but as part of our deployment strategy, we are going to be out front enough to make sure that we understand whether there are any funding needs. Right now, there is no additional funding needs in support of the IOC requirements as it relates to infrastructure.

Senator SCHATZ. Right, but I do not want you to wait until you are 100 percent sure to tell us. If you are at 98 percent sure, look this looks like it's going to be more money.

Mr. WINDOM. Yes sir.

Senator SCHATZ. We do not want to find out at the last minute in one of your quarterly reports. I guess I will let Mr. Short answer the question and then that will be my last.

Mr. SHORT. So far, sir, our early indication is our budget for infrastructure is on track. We do not see any indications otherwise. We would have alerted that. We have a lot of communication. Last thing I will mention. We did provide to the Hill, last year, within the last year, integrated infrastructure plan with OIT, and they are looking at the big things we are finding that alter the system, and they are incorporating that in their fiscal year 2020 budget and beyond to make sure all of the system is taken care of. So right now we do not believe we are going to find something like that, but we will let you know.

Senator SCHATZ. Thank you.

Senator BOOZMAN. Senator Hoeven is on his way, so. Senator Hoeven is on his way, and would like to weigh in but let me go ahead and just kind of close up and we will gavel it out once he gets done, but thank you all so much for being here. I know that

you all are working very, very hard and have huge jobs to do. This is certainly not a small or insignificant undertaking. In fact, it is just the opposite of that. It is huge. This new medical record system, though, has tremendous opportunity for efficiency and all of that translates down to better care for veterans and that really is what it is all about. So we look forward to working with you, and I think we can be a huge help in pushing things forward and, you know, we have got the easiest thing in Government, when you bog down is just not to make a decision. And so, we are going to do our best to help you come up with a decision one way or the other. So we do appreciate all of your efforts.

Have you got any other things on your plate?

I think we have asked about every possible question that can be asked.

Let me ask you about the fiscal year 2020 budget. Are you maintaining your commitment to funding initiative through the electronic health record account and not relying on transfers?

Mr. WINDOM. Yes sir, we have given you a budget that we believe supports our implementation strategy over the next 3 years. And so, we are not relying on transfers. I guess what I would offer is that, as I stated before, static contract dynamic requirement or dynamic environment. And so, as there are emerging requirements, I think we will remain transparent with your staff and be proactive in identifying whether we think there are any prospective funding shortfalls, but right now, we feel very good with the budget that you have allocated. And we are pressing forward.

Senator BOOZMAN. Very good. Okay, we will wait just a few minutes. Catch your breath and get sacked up for the next. Okay, you are off the hook. What he is going to do is, he is running a little bit late. Today is unique, you know, we have the State of the Union, the prayer breakfast is going on. The National Prayer Breakfast and the list goes on and on. And so that is another reason you all are in the same situations. You have got a lot going on. So we appreciate you taking the time to come over.

ADDITIONAL COMMITTEE QUESTIONS

And with that for members of the subcommittee, any questions for the record should be turned into the subcommittee staff no later than the close of business Tuesday, February 12th.

QUESTIONS SUBMITTED BY SENATOR SENATOR JOHN HOEVEN

Question. Last week, the VA announced its proposed access standards for community care which were required under the VA MISSION Act of 2018. The new access standards will give our veterans more of a choice when it comes to their care and where they would like to receive that care. As the VA rolls out its new, interoperable EHR platform, how will the Department work with, educate, and train VA community care partners to ensure that providers can properly access and update a veteran's medical record?

Answer. Understanding that many transformation efforts fail due to lack of leadership buy-in and/or cultural resistance to change, VA has a robust training and change management strategy to support the implementation of its new EHR solution. The Office of Electronic Health Record Modernization (OEHRM) analyzed the lessons learned from Department of Defense (DoD) and will continue to collaborate with VA clinicians, government stakeholders, and industry partners to identify effective end-user retention and adoption strategies to optimize the success of the new EHR solution. To engage frontline staff, VA is also hosting several roadshows and workshops to enable end-users to present their concerns and suggestions. Further-

more, VA will be providing on-site training for clinicians and providers prior to deployment of its EHR solutions.

Question. It is critical that the VA and DoD maintain an open line of communication as the new EHR system is implemented. I understand that the Departments have established an inter-agency working group to ensure that interoperability objectives are reached between the two agencies. How is the working group performing? Have potential challenges to implementation been identified? Are there any specific challenges the Departments are experiencing while operating under the current organizational structure?

Answer. VA and DoD are committed to successfully deploying their EHRs to improve access and the quality of healthcare for our Nation's Servicemembers and Veterans. The Federal Electronic Health Record Modernization (FEHRM) Working Group (WG) has been established to ensure VA and DoD have an effective and efficient inter-agency arbiter.

FEHRM WG will assess the Departments' current EHR implementation strategy and requirements, management and governance structures, and existing legislative authorities to recommend the optimal organizational construct for aligning plans, strategies, and structure across VA and DoD. The goal is to ensure both organizations receive timely decisions regarding the architecture and operations needed for the core technology.

Since November 2018, the WG met with technical, legal, acquisition, financial, functional, and data management subject matter experts from DoD and VA. Additionally, the WG has met with the Interagency Program Office to develop functional, technical, and programmatic functions for the ongoing success of the inter-agency working group. There have been no issues that would adversely affect the WG or its mission.

Question. VA fiscal year 2019 appropriations include a little over $1.2 billion for the VA to continue the implementation, development, rollout and maintenance of VA's new EHR system. What do you see as the most significant items of concern that could either drive up the cost or delay the rollout of VA's EHR system?

Answer. There are three items that could potentially impact the cost or timeline of VA's EHR deployment: system training and change management, information technology infrastructure upgrades, and creation of clinical workflows. End-users must receive adequate training on the new EHR solution to provide safe, high-quality care to our Veterans. VA seeks to mitigate this risk by developing and executing a training schedule 8 weeks prior to the Go-Live date at each rollout site. Infrastructure upgrades must be implemented at the enterprise and site levels to deploy a fully operational EHR solution. In addition, VA infrastructure must be capable of supporting the simultaneous operation of legacy systems (i.e., VistA) and the new EHR solution during the transition period. To mitigate infrastructure risks, VA is evaluating Initial Operating Capability site Current State Reviews conducted by Cerner to identify infrastructure requirements through gap analyses. VA is also developing acquisition strategies to meet identified infrastructure needs. Clinical workflows must be developed to improve clinicians' ability to provide high-quality care to Veterans. Cerner must provide education to VA to structure and align the workflow development process. VA must collaborate with clinicians and community care partners to design the workflows. VA held a Model Validation event in September 2018. This event resulted in an 8-stage process, which includes conducting eight follow-on national and local workshop events to identify potential workflow issues.

Question. Electronic health records are an important part of how we receive healthcare today. Having a record that one's healthcare provider can readily access can help save both time and money. That being said, given today's cybersecurity risks, there are also legitimate concerns about what is being done to safeguard private health information from cybercriminals. What steps are being taken to ensure that a veterans' private health information is protected? Are there additional safeguards that need to be taken in order to ensure that this information remains secure?

Answer. The joint EHR is stored within the DoD-authorized enclave (MHS GENESIS) hosted at Cerner Corporation. MHS GENESIS risk management and continuous monitoring activities are supported through Defense Health Agency, DoD Health Management System Modernization Program Management Office, and OEHRM unified interagency cybersecurity programs.

VA and DoD cybersecurity and network operations teams are working as one team to fight against cyber threats. Both departments are employing every reasonable measure at their disposal to ensure Servicemembers' and Veterans' patient records are secure.

VA will deploy security boundary protections including jointly agreed upon DoD authorized security architecture. VA and DoD require and employ data encryption both in transit and at rest using Federal Information Processing Standards-certified cryptographic modules. VA will use two factor authentication for access to the system as well as audit access to ensure users have correct access to the data their profile allows. Both VA and DoD use National Institute of Standards and Technology requirements and guidance to design, employ, and test security controls throughout the lifecycle of a system and the joint electronic health record initiative is no exception.

Furthermore, VA will embed personnel within the DoD's Cyber Security Service Provider forming a joint Network Security Operations Center (NSOC) specifically focused on the joint EHR initiative. Forming a joint NSOC will allow the agencies to integrate their respective protect, detect, respond, and sustain services allowing for more efficient, effective, and integrated vulnerability monitoring and management, network security (and performance) monitoring, intrusion detection, attack sensing and warning, vulnerability analysis, vulnerability assessment, and threat intelligence sharing.

QUESTIONS SUBMITTED BY SENATOR BRIAN SCHATZ

*Question.*I have concerns about the role that private individuals have played in VA procurement decisions. There are a lot of good men and women at the VA working in earnest to make decisions in the best interest of veterans and American taxpayers. I have no reason to suspect that any of you have acted otherwise. However, when it comes to the largest transformation in the history of the department, people need to be confident in how decisions are made.

Besides workshops, council meetings, site visits, and other routine and related community events, have you formally or informally corresponded with any private individual not officially involved with the EHR modernization through a contract for services or provider agreement?

Answer. No.

Answer. I have not formally or informally corresponded with any private individuals not officially involved with Electronic Health Record Modernization (EHRM) through a contract for services or provider agreement.

*Answer.*No, I have not formally or informally corresponded with any private individuals not officially involved with the EHRM effort through a contract for services or provider agreement.

*Question.*If so, what was the nature of that correspondence and did it directly affect, in any way, a procurement decision?

Answer. N/A

Question. Please provide the committee with any formal or informal correspondence that relates to the above request.

Answer. N/A

SUBCOMMITTEE RECESS

Senator BOOZMAN. And with that, we are adjourned. Again, thank you very much.

[Whereupon, at 11:52 a.m., Tuesday, Feburary 5, the subcommittee was recesssed, to reconvene subject to the call of the chair.]