# 180-DAY REVIEW OF THE ELECTRONIC HEALTH RECORD MODERNIZATION PROGRAM

## HEARING

BEFORE THE

SUBCOMMITTEE ON TECHNOLOGY MODERNIZATION

OF THE

COMMITTEE ON VETERANS' AFFAIRS
U.S. HOUSE OF REPRESENTATIVES

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**Wednesday, November 14, 2018**

U.S. HOUSE OF REPRESENTATIVES,
COMMITTEE ON VETERANS' AFFAIRS,
SUBCOMMITTEE ON TECHNOLOGY MODERNIZATION
AND MEMORIAL AFFAIRS,
*Washington, D.C.*

The Subcommittee met, pursuant to notice, at 10:00 a.m., in Room 334, Cannon House Office Building, Hon. Jim Banks [Chairman of the Subcommittee] presiding.

Present: Representatives Banks, Coffman, Bergman, and Lamb.

Also Present: Representative Roe.

## OPENING STATEMENT OF JIM BANKS, CHAIRMAN

Mr. BANKS. Good morning.

The Subcommittee will come to order.

Thank you all for being here today for the second hearing of the Subcommittee on Technology and Modernization on the electronic health record.

It has been almost exactly 180 days since the VA awarded the Cerner contract and began the Electronic Health Record Modernization, EHRM, program. We are here today to get a status report.

Federal agencies brief congressional committees on programs in private nearly every day. However, for this particular program, I believe it should periodically happen in public.

A lot has happened since May: The Office of EHRM has mostly taken shape. VA formed councils of health care providers to vet Cerner EHR and its workflows. Cerner has begun traveling to the initial implementation sites in Spokane and Seattle and has assessed their readiness. Cerner has studied the suitability of Military Health System Genesis, the Defense Department's Cerner EHR, as the baseline for VA. And VA has begun infrastructure upgrades at the first medical centers.

At some point next year, implementation will begin in earnest in Spokane and Seattle. The structure is mostly in place, but there is an enormous number of dots to connect. High-level organizational questions are still not settled. The workflow councils have a series of meetings spanning much of next year in which to hash out how the system should be configured.

VA has over 1,200 distinct decisions to make, often necessitating coordination with DoD. The infrastructure upgrades, many of

which will entail digging trenches and ripping out walls, will need to line up with the implementation schedule.

Practical problems, from the mundane to the esoteric, will undoubtedly arise. VA has already run into some. For example, nearly all of the computers in Spokane and Seattle are reportedly incompatible with Cerner and are being replaced.

We are moving into the middle of the beginning. VA has outlined the program, identified the next steps, and generally called out the dependencies and risks. What comes next is detailed plans and schedules. Only then will we truly know what to expect and what VA has bought.

I would like to take this occasion to address some persistent questions and clarify some jargon.

First, community provider interoperability has always been the elephant in the room. VA-DoD interoperability is very important, but VA is much farther behind in exchanging records with its community partners. There are many helpful tools, like health information exchanges, but no out-of-the-box EHR system completely solves this problem. No matter which EHR VA selected, more work would be needed to achieve interoperability with community health systems.

The VA has been actively grappling with this challenge for over a year now. The delays in awarding a contract were a result.

Now, some in the media see the, quote, "Mar-a-Lago crowd" behind every unexplained or unfavorable development. I can't speak to that. What I do know is that community interoperability is a very real problem, and for $16 billion, VA had better solve it.

The result of months of reviews by some of the best experts money can buy was language written into the contract concerning data standards, data rights, and future obligations of Cerner to advance interoperability. Not quite an answer, but paths to an answer.

It all means nothing if VA and Cerner do not follow through though. I am not ready to sound the alarm yet, but I have heard very little about this subject since taking on this role. I have expressed my concern about what seems to be a loss of focus on innovation.

Secondly, there was a spirited debate between VA and DoD about what, quote, "single common system," end quote, means. As the debate progressed, it became clear that their ability to interoperate seamlessly hinged on it.

Some thought it meant are both departments merely need to install the Cerner EHR or perhaps the same version of the EHR. That is apparently not enough. In the industry jargon, they must have a single instance.

That means both departments have to pull their patient data from the same database, which means the two implementations have to be joined at the hip. It raises the stakes. It is important to put this reality out in the open and early.

Thirdly, I expect there will be a lot of discussion this morning about standardization. That means VHA eliminating needless variations in how different facilities deliver care. It is a goal throughout health care, but not all standardization is the same. I am concerned VA may not be standardizing against any well-defined goal,

instead standardizing by default. It is not possible to accommodate what every single doctor and nurse wants, but the people running the EHRM program need to understand what they want and why.

Relatedly, I expect to hear the term "Cerner best practices." "Cerner best practices" means out-of-the-box, standard EHR functionality. More best practices mean fewer variations.

Finally, we are going to discuss risk. Some risks are specific to this particular EHR transition. However, other risk, probably more risk, would be the same regardless of the EHR system chosen. The fact is unwinding VistA is much more difficult than installing any EHR in its place.

I have high expectations, though, for the VA. I believe in transparency and reality. Frankly, the more I have learned about the EHRM program, the more daunting it has become. But this discussion inevitably becomes about doing anything or doing nothing. Doing anything is hard; doing nothing is easy.

With that, I yield to Ranking Member Lamb for his opening statement.

**OPENING STATEMENT OF CONOR LAMB, RANKING MEMBER**

Mr. LAMB. Thank you, Mr. Chairman. I have many questions but no opening statement, so I will yield back.

Mr. BANKS. Thank you, Ranking Member Lamb.

I would now like to welcome our first and only panel, who are seated at the witness table.

On the panel, we have the Executive Director of the VA Office of Electronic Health Record Modernization, Mr. John Windom. He is accompanied by the office's Acting Chief Medical Officer, Dr. Laura Kroupa, and his Chief Technology Integration Officer, Mr. John Short. Additionally, we have Mr. Travis Dalton, president of Cerner government services.

I ask the witnesses to please stand and raise your right hands.

[Witnesses sworn.]

Mr. BANKS. Let the record reflect that all witnesses have answered in the affirmative.

You may take a seat.

The Subcommittee has asked Mr. Dalton to be present to answer Members' questions, not to present a formal statement. Therefore, Mr. Windom will present the only opening statement.

Mr. Windom, you are now recognized for 5 minutes.

**STATEMENT OF JOHN WINDOM**

Mr. WINDOM. Thank you, Mr. Chairman, Ranking Member.

Congressman Roe, thank you for joining us as well.

Good morning, Chairman. Thanks, Ranking Member Lamb and distinguished Members of this Subcommittee. Thank you for the opportunity to testify on the status of VA's efforts to modernize our electronic health record, or EHR.

I am accompanied by Dr. Kroupa, the Office of Electronic Health Record Modernization, or EHRM's, Acting Chief Medical Officer, and Mr. John Short, OEHRM's Technology Integration Officer.

First, I want to take time to personally thank each of the Members of the Subcommittee for your continued support and shared commitment to the program's success. Because of your ongoing sup-

port, VA has been able to adhere to the implementation schedule while being a good steward of the taxpayers' dollars.

As you are well aware, VA's current EHR system, VistA, is unsustainable and cannot deliver critical capabilities to meet the evolving needs of the health care market. Through the EHR modernization effort, or EHRM, VA is working to provide veterans with access to a complete medical record by adopting the same EHR solution as DoD, allowing patient data to reside in a single hosting site, using a single common system. This will enable the seamless transfer of health data as servicemembers transition from Active Duty to veteran status to allow us to leverage an existing commercial solution to achieve interoperability within the VA, between the VA and DoD, and between VA and community care providers.

VA's multiyear implementation strategy will evolve as technology advances. It includes deploying the solution at initial operating capability sites to identify problems and correct them before deploying to additional sites. As challenges arise throughout the deployment, VA will work swiftly to mitigate potential impacts to veterans' health care.

Since VA provided testimony on EHRM before the Full Committee in June 2018, VA has accomplished several key milestones I want to highlight.

First, VA awarded three additional task orders that include data migration, enterprise interface development, functional baseline design and development, and IOC deployment.

Secondly, in June 2018, VA established OEHRM to provide oversight to the implementation. The office will ensure VA successfully deploys and maintains the new EHR solution and the health IT tools dependent upon it.

Additionally, in July 2018, VA and Cerner conducted a current-state review at VA's IOC sites. This provided VA with details of each site's specific as-is states and how it aligns with commercial standards to implement the proposed state.

Furthermore, because VA is committed to closely aligning its workflows with commercial best practices, it commissioned Cerner to complete a baseline assessment of how closely DoD's EHR solution aligns with these practice. Cerner provided VA with the analysis in September 2018, which revealed DoD's new EHR is, in general, in alignment with commercial best practices.

Also in September, VA held its model validation event, where it began the national and local workflow development processes for the new EHR solution. During this event, there were a series of working sessions designed to examine Cerner commercial-recommended workflows against VA's. This enables VA to configure its workflows to best meet the needs of our veterans while also implementing commercial best practices.

Finally, VA established 18 EHR councils, primarily comprised of clinicians in the field, to enable the configuration of national standardized clinical and business workflows.

To ensure the appropriate VA and DoD coordination, there remains an emphasis on transparency throughout the integrated governance both within and across VA. At an interagency level, VA and DoD are committed to instituting optimal organizational de-

sign that prioritizes accountability and advances synergy between VA and DoD.

The Department has established an interagency working group which meets regularly to review use cases and collaborate on best practices to ensure interoperability objectives are achieved between VA and the DoD. By learning from the DoD, VA is able to proactively address challenges and further reduce potential risk at VA's IOC sites.

Mr. Chairman, this concludes my opening statement. I am happy to answer any questions that you or the Members of the Subcommittee may have, and thank you very much for the opportunity.

Sir, I want to add some additional remarks with my time. There's been a number of articles posted. I look forward to answering whatever questions or concerns that have you regarding those articles.

I just want to remind you, you know, Chairman, you're a naval officer. I've served 34 years in the Navy. I have performed on teams, I have supported teams, I've led teams. We are building a team in VA.

I have an uncle, Wendell Davis, who just entered into hospice in the VA St. Louis Medical Center, has about 10 days left. This is not only personal, it's important to our veterans, which I am one of. We remain committed to fulfill the objectives of the VA and what you've charged us to do.

Thank you.

[THE PREPARED STATEMENT OF JOHN WINDOM APPEARS IN THE APPENDIX]

Mr. BANKS. Thank you, Mr. Windom.

I'll begin the questioning.

Mr. Windom, let's begin with a budget and the cost estimate. Please let me know if I have the following facts correct. As a result of this Cerner contract being awarded later than planned, you had $205 million unspent in fiscal year 2018. Is that correct?

Mr. WINDOM. Yes, sir, that's correct.

Mr. BANKS. So, with the infrastructure upgrades, will they proceed more gradually than originally planned? Is that correct?

Mr. WINDOM. Sir, more gradually—what we're seeking to do—and I've got my Chief Technology Officer here with me, and he can respond in greater detail.

What we're seeking to do is ensure that we balance the implementation appropriately of our infrastructure readiness plans such that we are not too far out in front of ourselves with regard to user adoption. The last thing we want to do is invest and then something become obsolete, so our timing is critical.

So the answer to your question is we've got an infrastructure plan that will support our implementation objectives—

Mr. BANKS. Got it.

Mr. WINDOM [continued].—with the proper timing, sir.

Mr. BANKS. Got it.

So, because of that, compared to the original November 2017 estimate, you are now forecasting $214 million less in fiscal year 2019 and $236 million less in fiscal year 2020. So, conversely, in later years, the infrastructure costs will run slightly higher than

originally estimated, all together about $204 million more through fiscal year 2027. Would you say that's correct?

Mr. WINDOM. I would say that's correct, sir.

Mr. BANKS. So I need you to help me on this one. In spite of all that underrun, your total estimate over 10 years went up, has already gone up before any real work actually begins, by about $350 million, from roughly $15.8 billion to $16.1 billion. How can that be?

Mr. WINDOM. Sir, when we originally briefed you on that 10-year lifecycle cost estimate, we in no way included the VA government employee costs. We made that clear with the asterisk noted in our original estimates. Those estimates for the support we need from a VA employee requirement are now included in those estimates. So what you're looking at primarily are employee staff salary numbers.

Mr. BANKS. Got it. That's what I thought you would say. So I find it hard to believe that such a basic part of running the program, government salaries, could have been overlooked. But even if I accept that at face value, it's an enormous amount of money.

So, if we figure they are senior GS-15 employees, which I understand many of the folks in your office are, and we include their cost of benefits, $350 million buys roughly 2,000 full-time employees. Now, there are less than 300 people working in the EHR Modernization Office. So am I mistaken here? What am I missing?

Mr. WINDOM. Sir, $350 million, by my simple math, equates to about $35 million a year over 10 years.

We were very much up front, as we executed the strategy associated with the D&F, that we were not taking the time to fully calculate the VA employee costs during this timeframe in order to move aggressively toward our goal of awarding the contract.

What we have recently come back to you with is what we think are some very reasonable numbers with regards to program employee requirements, approximately 269 overall government employees.

And so, you know, the expertise that we need, I've said before in previous hearings, we've got to have physicists to grade physics tests; we have to have highly qualified subject matter experts to grade the implementation efforts of Cerner. Those people in the industry cost money.

And so we will continue to be judicious with taxpayers' money. We hope through efficiencies learned through IOC we will drive down those costs. But what I have provided you is a realistic estimate such that we can plan accordingly.

Mr. BANKS. All right. I appreciate that, but let's explore another explanation for this budget increase.

You are now estimating that the project management office support costs will go up between $50 million and $90 million every year through fiscal year 2027. That comes out to about a $583 million increase over the life of the project. These are the contractor costs to staff your office, principally a contract with Booz Allen Hamilton. Is that correct?

Mr. WINDOM. That's correct, sir.

Mr. BANKS. So the Booz Allen contract is already in place for a period of 5 years. Is this a big increase to the Booz Allen contract, or are we talking about even more support contracts?

Mr. WINDOM. Sir, the numbers that you're looking at are intertwined. There is no distinguishing. Our number remains for the life of the contract in support of Booz Allen's support approximately $120 million to $125 million. The numbers that you're seeing are support of executive councils, workflow management and development processes, alignment processes, and also effectively a satellite command activity we're going to need to have in the Pacific Northwest.

The numbers, again, are what we know today. The great thing about IT is it continues to evolve. There are going to be efficiencies gained that we just can't forecast at this point. We will be looking at those numbers very keenly, very astutely over the coming years to ascertain whether the budget requirements have remained the same or we need to adjust accordingly.

There's advancements in technology that are forthcoming that we expect to drive down those numbers. But what I wanted to give you was an honest perspective, sir, and that's what I've given you.

Mr. BANKS. Thank you.

My time has expired. I yield 5 minutes to the Ranking Member, Mr. Lamb.

Mr. LAMB. Thank you, Mr. Chairman.

Dr. Kroupa, welcome, first of all. Thank you for joining us. I wanted to ask you a little about the workflow councils. Can you just kind of describe to me in layman's terms your understanding of how those are going to work and the clinician involvement?

Dr. KROUPA. Certainly.

So we've formed 18 clinical councils. Each of those councils are centered around a type of clinical care. So we have a provider council, we have a nursing council, you know, laboratory councils. There are different clinical themes.

Each of those councils have a mix of field staff and central office staff. Basically 60 percent of the folks on these councils are folks who see patients, who are out in the medical centers. But we also have central office staff, who understand national policy and direction.

These councils have been meeting on a weekly basis for several months. They attended the model validation event in September, and they just got back from the first workshop in Kansas City, workshop 1.

Mr. LAMB. Okay. And after the councils—so you're saying they meet every week?

Dr. KROUPA. They meet by phone virtually.

Mr. LAMB. And after that, what happens to the information that's exchanged? I guess, who is that information flowing to?

Dr. KROUPA. So each council has an administrator, a project manager. There's folks from Cerner that are also part of those meetings. So after the first workshop, they all got together in a room, they made decisions, they got educated on the system. And they have a whole set of activities that they are going to be doing over the next 6 weeks in preparation for the next workshop.

So they have different sprints where they talk about a certain type of activity, and then they have their input into that, and then they come back and refine it and refine it until everybody is satisfied with the output of that work. So they have a series of eight workshops total that they will be doing over the course of this next year.

Mr. LAMB. And in those workshops, are they—what is it precisely that they're talking to each other about? Are they looking at EHR examples, or are they more talking about their existing workflow?

Dr. KROUPA. So the workshops are led by Cerner staff, who present them with Cerner best practices, and they have a set of decisions that they have to make. In fact, I think we know that we have 2,760 decisions to make over the course of these workshops. And then there is a tool that they use to track all the decisions that are made so that that is what leads to the configuration of the electronic health record.

And in these councils we also have included Department of Defense staff to help us understand the decisions that they've made and the decisions that they've had and bring that knowledge into the room.

Mr. LAMB. Okay. And are the councils full? Like, do you have full participation right now?

Dr. KROUPA. Yes. In fact, we had—we are very engaged, very enthusiastic staff. And, really, we filled up the Cerner room when we were there for the workshop. So there is no problem with getting our clinical staff involved, and we have a list of folks who are waiting to be rotated in.

Mr. LAMB. And the clinical staff, are they clinicians from the three test sites, or are they just from everywhere in the VA system?

Dr. KROUPA. They're from everywhere in the VA system, but VISN 20, which is the IOC site, has a representative on every council.

Mr. LAMB. Okay. So those 18 councils, are they divided kind of by, like, subject area? Is that what you're saying?

Dr. KROUPA. Correct.

Mr. LAMB. Okay. Got it. All right.

Mr. Dalton, can you just describe for me, if you know, the information coming out of these councils that is then being taken by Cerner, what is Cerner doing with that sort of on a weekly, monthly basis at this point?

Mr. DALTON. Certainly. First of all, I'd just like to say thank you for the opportunity to be here on behalf of Cerner.

Mr. LAMB. Sure.

Mr. DALTON. It's an honor and a pleasure to do that. I've led our government business since 2011, so I've had the opportunity to be along for the entirety of the journey with DoD and VA. So I appreciate the opportunity to be here.

The other thing I would note related to the councils was that there is also outside representation from leading academic and other institutions, so these are not just Cerner points of view and inputs. We're getting a variety of inputs from a multitude of folks across the industry that use different systems, and I think that's important to note. We welcome that input as part of this process.

Mr. LAMB. Can you give me some examples of the institutions involved?

Mr. DALTON. I think some of the leading institutions—Dr. Kroupa?

Dr. KROUPA. I know we have folks from Yale as one institution. We have some of the bigger health care systems that have implemented Cerner across the country are also part of it.

Mr. LAMB. Got it.

Mr. DALTON. Yeah. And those councils—

Mr. LAMB. My time is up. We can come back to this in another round. I don't want to—thank you, Mr. Chairman.

Mr. BANKS. The chair recognizes the Chairman of the Full House Veterans' Affairs Committee, Dr. Phil Roe.

Mr. ROE. Thank you. And, Mr. Chairman, I'm sorry Mr. Coffman and I didn't get the memo on the striped tie this morning the rest of you have on.

You know how strongly I feel about the EHR modernization and what a priority it's been for us in the Committee and for patient care.

It means a great deal of scrutiny for the VA leadership, and a few years ago that scrutiny would've probably been decidedly unwelcome, and they would've been not shy about telling us so. But to Secretary Wilkie and his team's credit, they've been engaging with the Subcommittee constructively. And I told the Secretary, I said, if we don't get this right, you and I need to go in the witness protection program, and I hope they hold a couple of spots for us.

I've been watching the EHR modernization plan to come together the last year and a half, and during Secretary Shulkin's tenure there was an intensive look at interoperability. Now, I expressed my concern about transferring all patient data, and that became obvious when I was at Spokane a while ago. VA seems to have worked through those issues and understands what capabilities Cerner provides out of the box and what additional work will have to take place. But this by no means is interoperability with the community providers, and we know that's not easy.

Again and again, we turn to a basic question like how the VA system will be situated with respect to MHS Genesis and how the clinical standardization is going to proceed. I'm a little uncomfortable about that. Ideally, those questions would have been answered first. That being said, as long as they are thoroughly and transparently answered before Cerner starts installing the EHR in Seattle and Spokane, the situation should be manageable.

Now, Dr. Kroupa, typically after EHR implementation, the medical practice suffers a large productivity hit. I know when we put ours in our office, the way we solved that problem was the doctors just stayed late at night entering the data well into the night. And we know there's about a 40- or 50-percent temporary reduction in efficiency and capacity; that's pretty normal.

There have been discussions at the VA about designing the Cerner implementation to limit the productivity hit 10 percent. Do you think that's possible?

Dr. KROUPA. Well, I agree that that is one of biggest things that we need to consider as we look forward here. We are looking at all the different possibilities in terms of what the percentage will be.

We're making active plans to mitigation the loss in productivity that will occur during training and go-live.

We have a committee that is headed up by VHA that is looking at various strategies. Some of the things we're looking at are using our telehealth capacity to see patients. So while the folks that are at the IOC sites are getting trained and getting used to the system, we're looking at bringing in temporary staff to help see patients while the staff at the sites are also involved. We're looking at how we can use the community resources if there's a decrease in capacity. A variety of mitigation strategies.

And we also have a very, very robust change management training strategy so that staff will be able to quickly, you know, get accustomed to the record and be able to regain their productivity quickly.

Mr. ROE. Well, I've been warning VA groups when I go to see them that this is going to happen. And we already have a shortage of staff at the VA, medical staff. This is going to be a big hit for the Spokane region. We know what happened in DoDat Madigan. We know what's happened there already.

So I think that's something we have to plan for. And I hope you are doing that. And I just wonder how you are going to be able to do that, whether you're going to—and the other thing I wanted to know is, from DoD to VA, to Mr. Lamb's questions, what have we learned from there that's transferrable—and maybe, Mr. Dalton, you can answer this—to VA?

Because—and the other part of question is, I know the people—I know when we put it in our own office, implemented it, the people implementing it knew very well. But are you getting the information out to the worker bees, the people who are actually going to be using it at the site? The people implementing it will know very well. They'll have had weeks and months and maybe a year or so of training on it. But the person actually doing the care and the nurses and the doctors, are they going to be brought up to speed in time to do this? Because this is a big, big process you're going through.

Mr. DALTON. Thank you, sir. I appreciate the question.

Yeah, we learned some hard lessons with DoD. There's no doubt about that. I think transformation is always hard and it's always difficult.

We're doing things, a lot of things, differently here. So we're engaging with the sites early and often. So one of the things that we've done is a current-state review and assessment. That's an activity here we didn't do with the DoD.

We're also doing eight workshops, so we're doing more workshops up front. We're doing more of an iterative process, where we are getting regular design review and we're making sure that it's understood what those decisions are that are being made.

This is a provider-led process. We have 18 councils with a variety of input. They're also assisting us, to the earlier question, with validation of workflow done to date by the DoD, new workflows that we need for VA. And then they're assisting with validation of those elements.

And then several other things, too, sir, around training. We've created 100- to 400-level courses for the VA based on workflow, not

based on just the function that you serve but based on the workflow, the entirety of the workflow. We've got a VA play domain that we're introducing that will allow folks to get in early and have access and a better understanding.

And then Cerner will be providing the help desk support direct and also ongoing sustainment in the VISNs and at the VAMCs.

Mr. ROE. Let me give you one—

Mr. DALTON. Yes, sir.

Mr. ROE. I know my time's expired, but I want to say one other thing before I finish, is that what you have to have to make this implement and work correctly is that when a provider is sitting there at a computer screen—and I've been there—and you hit the blind canyon, you don't know where to go, you're stuck, you can't call 1-800-HOLD. You've got to have somebody immediately available to be able to access you to get you through that.

And I would encourage you, if you don't do anything, that will stop a lot of the decreased productivity, is just having somebody get stuck and they don't know where to end up.

I yield back.

Mr. DALTON. Yes, sir.

Mr. BANKS. Thank you, Chairman Roe.

The chair recognizes the gentleman from Colorado, Mr. Coffman.

Mr. COFFMAN. Thank you.

Mr. Windom, in part you've answered this, but I wanted to go into a little bit more detail. A $350 million cost estimate increase this early in the project is clearly bad news. I get that it's the 10 years.

Cost increases tend to lead to more cost increases. If you have more cost increases down the road, is VA going to ask Congress to appropriate the additional amounts or do more internal reallocations to take it out of other accounts?

Mr. WINDOM. Sir, I'm more than sensitive to cost schedule and performance. I couldn't have been more clear 19 months ago when we offered our estimate and then refined it that it did not include the cost of VA government employees. We are staffing 18 councils. We were also required to go back and pay our bills back to October of 2017 generated by the EHR program in reimbursing VHA activities as well as OI&T activities that supported us.

So, again, this is a moving target. Extremely dynamic environment. What you can count on me to do, sir, is be transparent with you. We have given you projections over the next 10 years. We hope that efficiencies are gained as part of discoveries at IOC. And we will continue to refine.

One of the reasons that our projected numbers of a 700-person OEHRM have come down to 269 is because I value leveraging the existing resources that are present in the VA today. I have a great relationship with VHA. I have a great relationship with OI&T. They have tremendous expertise that they can bring and provide at our disposal. We will be leveraging that to the maximum extent. The more we can utilize that, the more that bill comes down, because those are resources that are already in place, sir.

Mr. COFFMAN. Thank you, Mr. Windom. I've got confidence in you; I don't have confidence in the structure. I think the notion that we're still at the point where neither DoD or VA has taken

the lead—and I think that one of them has to have ownership for it. One of them has to call the shots. The notion of having this intermediate organization between the two, these two behemoths, these two gigantic entities, I think at the end of the day is just unworkable.

And I would like to you comment on that.

Mr. WINDOM. Yes, sir. I mean, my military background has been revealed. I am an organizational-chain-of-command person. I understand a single person in charge. That single person in charge is the DepSec. Secretary Byrne is in charge of this activity.

Between DoD and VA, one thing I can assure you is that Secretary Wilkie has challenged us daily to look at opportunities for efficiencies between the two agencies. And, also, the joint statement that he and Secretary Mattis released reaffirming their commitment to our jointness, our interoperable objectives, is evident throughout our processes. And I feel very good about the working relationship with DoD. And we're going to be looking to gain greater efficiencies as we work the various challenges that we will encounter, sir. I recognize and understand your concern.

Mr. COFFMAN. But wouldn't you agree that the reason for—that the fact is that the problems with the failures in the past were that you had these two entities with no one in charge and they simply couldn't come to an agreement?

Mr. WINDOM. Sir, I spent 33 careers in the Navy, so my experience within VA and the history of VA is very limited. What I can tell you over the past 20 months is we've succeeded at every milestone that we've encountered or desired to achieve.

And so I've seen nothing but unity in pursuit of this mission amongst the entities that are alleged to be fractured over the years. They have come together. I don't know if it's the stars aligning, but the stars have aligned. I feel the momentum. You folks have paved the way with regards to your support. The VSOs, everyone is on board that this is something that needs to be done.

I think that it's important to have disagreements and healthy tension because that's what keeps us on our toes. That's what keeps us from entering into groupthink, and that keeps us in support of our veterans and moving in the right direction.

Mr. COFFMAN. Well, I thank you for the service. As someone who—an Army-Marine Corps person here, I thank you for your service to the country.

You mentioned that there was an allegation that these organizations were fractured. I think it's more than an allegation. I think they, in fact, were fractured, and I hope that's not the case today.

I yield back.

Mr. BANKS. The chair recognizes the gentleman from Michigan, Mr. Bergman.

Mr. BERGMAN. Thank you, Mr. Chairman.

Probably there hasn't been a VA hearing that I haven't asked the question of the witnesses, do you, you know, feel a sense of urgency in your organization. I'm not going to ask that question today. I'm not going to ask it probably ever again. Because I'm just going to say: Show me where the sense of urgency, give me examples, give our Committee examples, if you will, of the sense of urgency for this.

You hear about cost overruns. You hear about delays. You hear about entities not working together. There's always going to be some of that.

I guess what I'm looking for, as a Committee Member here, Subcommittee Member, is to have you build our confidence that we're actually going to see results. Okay? Build our confidence. Because when we go back to the district and I go back to my district, I mean, if I had 10 interactions today in the district, probably 5 of them are VA-related, and usually it's involving health care.

But the point is, for now and future, it's going to be: Show me, show us that sense of urgency.

Is there any reward for those participating in the project to achieve results? Is there any reward, financial or otherwise, or promotion?

Mr. WINDOM. Sir, the Booz Allen contract is a time and materials contract, so there's no incentive other than the profit associated with that contract. The Cerner contract is an IDIQ contract where there's no additional incentive outside of the profit that has been negotiated.

What I can tell you is that the partnership—you know, sir, we talk all the times amongst ourselves about going into VA medical centers and the VA facilities. That's a heck of a reward in seeing what we can do in the way of improving patient care in that arena. So, really, I don't think you'll find anybody at this panel—or most people in the VA, they're not doing it for the financial windfall. They're doing it because the ability—

Mr. BERGMAN. Well, let me—yeah, let me—

Mr. WINDOM. Yes, sir.

Mr. BERGMAN [continued].—cut to the point. Because it's okay if there's no reward. Is there any threat to anybody's jobs if it doesn't work?

Mr. WINDOM. Sir, as we—

Mr. BERGMAN. Yes or no?

Mr. WINDOM. Sir, the threat would be to my job, because I feel I'm the accountable person to the DepSec. So—

Mr. BERGMAN. Do you have milestones in your job, if you don't meet them, you're relieved?

Mr. WINDOM. Sir, I have an evaluation that I am required to complete, and I am graded every year on my performance. So my performance is constantly being graded. I serve at the pleasure of Secretary Wilkie—

Mr. BERGMAN. Okay.

Mr. WINDOM [continued].—as I did of the President.

Mr. BERGMAN. All right. Well, let's get in—

Mr. WINDOM. So that's how I feel.

Mr. BERGMAN. Okay. Well, I'm curious, because, you know, either if we don't incentivize good behavior, we're not going to get it, and if we don't hold people accountable for their actions—and you've chosen a responsible position. And people who lead, you know, lead. And if they—in the military terms, if you're not doing the job, you're relieved of command, I mean—

Mr. WINDOM. Yes, sir.

Mr. BERGMAN [continued].—in simple terms. And it gets gray when you get outside of the military when it comes to performance, resignation, you know, moving upward, whatever it happens to be.

But in specific—and this is for either you, Mr. Windom, or Mr. Dalton – what have you found in your readiness assessments of the Spokane, Seattle, and American Lake medical centers? How much will it cost in money and time to resolve the findings and prepare the facilities for the EHR to be installed. Because that's our beta site, right?

Mr. WINDOM. Yes, sir.

Mr. BERGMAN. Okay. So what are the numbers?

Mr. WINDOM. Sir, we've got full infrastructure plans that we just presented to the staff yesterday, as a matter of fact, that we can give you a full laydown of costs associated with the infrastructure.

I will tell you, the term I use is: Our CSR have revealed no showstoppers. And I'll let Mr. Dalton comment on that. What I mean is, when they went out to our respective sites, they saw the similar and same deficiencies that they've seen in their commercial implementation. So we feel very comfortable that we have a path to success.

So I'll let Mr. Dalton comment on the remainder of that.

Mr. DALTON. Yeah, I think we were pleasantly surprised by the impetus for change. So there are a lot of folks that were glad to see us and want this change.

I think that VA is unique and it's different, so there were some areas we uncovered that we need to focus on now: telehealth, behavioral health, reporting. Those are big areas, big content areas, unique patient population. We wanted to know that now; that's why we went.

Mr. BERGMAN. Okay. I see my time is up. Again, you can take the question for the record. How much time and how much money, the question I asked, in specific. How much will it cost in money and time to resolve the findings that you have?

Mr. WINDOM. Sir—

Mr. BERGMAN. For the record.

Mr. WINDOM. We—

Mr. BERGMAN. My time has expired.

Mr. WINDOM. Oh, yes, sir.

Mr. BERGMAN. Mr. Chairman.

Mr. BANKS. Thank you.

The Committee now will begin a second round of questioning, and I will begin with this.

Mr. Windom, on September 26th, Secretary Wilkie and Secretary Mattis issued a joint statement that promised a new and improved organizational structure to manage EHRM and MHS Genesis. When will this be announced? And what have you so far ruled in and ruled out as part of that structure?

Mr. WINDOM. Sir, I would offer: Nothing has been ruled in or nothing has been ruled out. The undertaking that you described is a complex undertaking, and in such—

Mr. BANKS. Okay. Then will you at least commit to briefing the Subcommittee before you institute any organizational changes?

Mr. WINDOM. Sir, I don't speak for the Secretary, but the Secretary will not take exception to that briefing whatsoever.

Mr. BANKS. Okay.

Mr. WINDOM. So, after the appropriate assessments are done, I welcome the opportunity to come back and tell you what has transpired.

Mr. BANKS. Okay. I appreciate that.

I'm sure that you're aware there was a media report recently that the DoD examined the possibility of taking over VA's EHRM program, but the lawyers determined DoD lacks the statutory authority to do so.

VA must have been aware of that discussion. You came from DoD, so I'm sure that you have many relationships there. Do you confirm that DoD considered a takeover, or do you deny that?

Mr. WINDOM. Sir, I know of no such attempt. The VA has been on a course that we have not wavered from since the signing of the D&F back in June of 2017. I have been either the lead or the deputy for that entire period of time, and no such proposals were broached with me whatsoever.

Mr. BANKS. So, Mr. Windom, in my opinion, a complete takeover by one department would be very risky. That being said, further integration is probably inevitable given the nature of the single Cerner instance. My concern is that VA and DoD align what makes practical sense, not what serves a bureaucratic interest. What functions do you think should be managed jointly?

Mr. WINDOM. Sir, I think there are a myriad of things. I can give you a few, but there's differences that we still have to assess. So I think, from a VA perspective, we are very much in line with your thoughts. An assessment has to be done as to what inhibitors or challenges may exist.

There are efficiencies we can gain immediately: cybersecurity; system engineering architecture that revolves around data hosting where we are putting our data in the single enclave; URLs, which we already have gained a success because we have a united commitment with DoD to use the same URL. We just got PKI certificates issued for that URL. So there are a number things. Joint patient identity management.

Sir, what we'd like to do is come back to you in total and brief you on areas we think efficiencies can be gained sooner rather than later.

I can tell you that the VA's mission set is different. We've got 30 percent more capabilities to deliver as part of our clinical requirements. And those are things that we have to apply effort to as well. So we understand the differences but the sameness, if you will, but we are solidifying what the strategies could be or should be to capitalize on those prospective efficiencies.

Mr. BANKS. Okay. I appreciate that.

Let me shift gears a little bit. Mr. Windom, I still don't understand why Seattle and Spokane were chosen as the initial implementation sites—as you know, I've visited them—other than that because DoD had already chosen nearby sites.

Early on, the Committee advocated for the James A. Lovell joint VA-DoD health care center to be one of the early sites. The VA rejected that out of hand, essentially because it would be too hard. That does not say much, by the way, for integration.

Subsequently, there has been some discussion of an east coast site in one of the first several implementation waves, ideally another joint VA-DoD facility. Has any decision been made about that? And if not, when might a decision be made?

Mr. WINDOM. Sir, there has been no additional discussions under Secretary Wilkie and Secretary Byrne, DepSec Byrne, on an additional east coast site. So we have done no further analysis on for the past 3 months.

As far as the north Chicago facility, sir, what we sought to do was align our schedule to the deployment schedule of DoD at those joint facilities. We did not want to cause the people who populate those to incur an additional burden of DoD coming to deploy and then us coming to deploy. That would be an unreasonable and unnecessary change management burden. So we aligned our schedule to when the DoD was appointed at site.

Now, as far as why we went to the Pacific Northwest, as part of our negotiations process—and we've got Mr. Dalton sitting here—certain economies of scale, labor efficiencies associated with them being in that region at this point in time, led to a lower cost to our taxpayers in that negotiation process.

Mr. BANKS. Well, let me stop you right there. And, briefly, can you explain, why wouldn't DoD and VA deploy at the same time? Why couldn't they?

Mr. WINDOM. Well, they could, sir. What we chose to do in our negotiation process is align to what the DoD already had on their schedule. And so their schedule was awarded, obviously, before ours, so we simply aligned those joint facilities to their schedule. We brought all 13 of those facilities forward in our schedule and are prepared to deploy those out of the normal sequence that that region would offer.

Mr. BANKS. Okay.

My time has expired. The chair recognizes the Ranking Member for 5 minutes.

Mr. LAMB. Thank you, Mr. Chairman.

Mr. Dalton, just kind of a couple things before we pick up where we left off. The 2,760 decisions I think someone mentioned, so is Cerner generating those and then presenting them to the workflow council? Is that how that works?

Mr. DALTON. Yes. We have a process and a tool that we use where we generate those decisions.

Now, to be clear, our goal is to be proactive in that decision-making. We're not welcoming the councils in and saying, "Hey, what do you think?" We're trying to be proactive based on our best practice and our experience across the industry and the globe.

Mr. LAMB. Okay. So those decisions, is that kind of what sets the agenda of these workflow council meetings? Is that basically what—

Mr. DALTON. It is.

Mr. LAMB [continued].—time is spent talking about?

Mr. DALTON. Yes, sir. We're doing multiple things. So one is training and education up front, so they have a better understanding of the workflow and the system. Secondly is validation of decisions that have already been made. So we've done a lot of hard work with the DoD. We'd like to leverage that work. I think that

makes sense for the taxpayer, it makes sense for the program going forward. So they're validating those decisions. And then they're doing work around the creation of some of the new capabilities that the VA has that the DoD did not obtain. So they're doing multiple things.

And, furthermore, they're also participating in content development. So in areas where we know—we don't claim perfection. There are areas where we need to work closely with the VA. I've mentioned a few of those. We expect to work with those councils on developing content to help us best meet the needs of the veteran.

Mr. LAMB. Can you give me some examples of how clinicians' feedback in some of those areas shapes the way that Cerner acts going forward?

Mr. DALTON. Sure. I think a couple of the big ones we've talked about. Specifically, the VA has a unique population. I don't think that's a secret to anyone here. You've got an older, sicker population. They have unique needs in terms of behavioral health and some of those areas.

We expect that the work we do with the VA will help lead us into the future in that area. We expect that we're going to have to work closely together in that area in order to meet the needs of the agency, but we also think that helps make us better, commercially and otherwise, as well.

Mr. LAMB. I guess what I'm asking you is, how does the information from the clinicians on these councils inform the work you're doing in those areas on the electronic health record?

Mr. DALTON. Sure. So we capture those decisions. We have a tool that we use. So we capture all those decisions. We utilize those decisions to configure our systems. We also utilize those decisions as part of our broader process we use as a company. So our best practices are generated by our clients. So we have a structure where we utilize client feedback from across the globe in order to inform our best practices. The work we're doing with the VA and with the DoD also informs that process—

Mr. LAMB. Okay.

Mr. DALTON [continued].—as well.

Mr. LAMB. Is there a mechanism for kind of open-ended feedback from the clinicians on these councils to Cerner? Or is it all kind of confined within this structure of the decisions you're presenting them?

Mr. DALTON. There's a mechanism for open-ended feedback. From our perspective, we'll consider all of their feedback. In the interest of efficiency and getting done, you have to try your best to maintain some level of standard in decision-making—

Mr. LAMB. Sure.

Mr. DALTON [continued].—but we're always open to new ideas and innovation. So, absolutely.

Mr. LAMB. So, like, if a clinician is sitting on one of these councils, you're saying that they do have the opportunity to raise issues to Cerner that are in front of them right now?

Mr. DALTON. Absolutely.

Mr. LAMB. If they're dissatisfied with the way the current system works and they want to tell you about it so that you can fix it in the new EHR system.

Mr. DALTON. Absolutely. And we capture that, and we adjudicate each of those.

Mr. LAMB. Okay.

Mr. Short, the site assessments that were conducted over the summer, it sounds like there were a lot of deficiencies in technological readiness, particularly with computers, printers, that kind of thing. Do you agree that it appears that most of the computers are not up to the standard that they need to be?

Mr. SHORT. Yes, sir. Most of them are 5 years old—

Mr. LAMB. Okay.

Mr. SHORT [continued].—and need to be replaced.

Mr. LAMB. So what is the plan for that moving forward? Or what do you need from us? What do we need to do in the next year or two to address that?

Mr. SHORT. We have an integrated infrastructure readiness plan with OI&T where we're both working together to maximize the use of their current contracts so we don't have additional administrative overhead for those.

And OI&T is also taking our specification for other replacements that they will do in that area in the future. So when they do a replacement for other facilities before we get there, rather than buying a brand-new computer that we would roll to a year later and replace, they'll be using that as specification for monitors and that sort of thing.

Mr. LAMB. Okay. Would you agree that that has to be fixed before the go-live time at the three test sites?

Mr. SHORT. Yes, sir. Our goal is to be done 6 months ahead of time. The IOC sites may go a little bit shorter than that, but after that, they'll be 6 months before. That way, the technology readiness is completed for change management before the functional matters.

Mr. LAMB. Thank you.

Thank you, Mr. Chairman.

Mr. BANKS. The chair recognizes Dr. Roe for 5 minutes.

Mr. ROE. Thank you.

And the reason this Technology Subcommittee was stood up, we're looking at a—and when I went out to Fairchild and DoD, I realized that that was not going as well as it should and we should really pay close attention to it.

The other reason that I think all of us have some angst—we're going to have a hearing later today on the disability exams by contract physicians that the VA can't account for. Every one of us has heard from student veterans around the country now, this fiasco about being able to get the schools paid, the per diems paid. There's a technology failure at VA that really is creating real problems when the taxpayer dollars are there. The money's been appropriated, and yet we can't get it disbursed right.

So that's why we're doing this. And I think this Subcommittee and the Full Committee are trying to work to make you successful. We want to make you successful.

When Mr. Lamb was mentioning about the council, 35 percent of the VA health care is not provided inside the VA—at least 35 percent. It's provided outside. What are we doing for outside practitioners, like myself, who, when I went home this past weekend, or this past month, I mean, before the election and talked to a dialysis center that can't get any information shared—I'm pairing the VA and that particular dialysis center together so they can work those problems out. They have no way to share data. That's a third of all VA health care.

Are we doing anything? I noticed you mentioned Yale and others in the private sector out there working with you. But how are you going to integrate an individual practitioner like me so when I'm seeing a VA patient I can get that information back to the VA for that patient?

And, Dr. Kroupa, you can probably take that.

Dr. KROUPA. Thank you. That is a challenge, definitely.

So, by going on the Cerner platform, that will allow us to utilize the national systems that are in place for interoperability.

We also have included—we have a whole community care council that is looking at all the different workflows for how patients get referred into and out of the VA and all the mechanisms that go into that to make sure that information is exchanged and put into the system not just as a piece of paper or as an image but actually the data itself is—

Mr. ROE. But how will I, out in my practice out in Johnson City, Tennessee, how will I be able to access the record? How am I being brought in to access that—because there are thousands of doctors out across the country that are doing this—the record at Mountain Home? We're getting right down to the specifics of how is that going to work.

Dr. KROUPA. We're working—

Mr. ROE. Because if that doesn't work, the system doesn't work.

Dr. KROUPA. We're working on that in terms of we will be using the interoperability mechanisms that Cerner has in place, the health information exchanges—

Mr. ROE. Okay.

Dr. KROUPA [continued].—that are already in place, and the care well system that's in place. So we'll be able to utilize that.

We'll also—again, Community Care also has different mechanisms. They're currently using the VistA system. Some of those may be brought over into our referral process so that there will be more information coming to you when you get our patients and then a mechanism for you to put that information—send that information back to us.

Mr. ROE. Well, it isn't happening right now. And I wonder—again, I hear that, but will that health information exchange—will I be able to, when I see a patient out in—like, in Spokane, Washington, that's going to go—you're beginning to get that live. There are physicians out there that are going to be seeing patients outside the VA in remote areas. Will they be able to access the information through the health—because if you can't make that step work, this won't work; it's a failure.

So I guess—

Mr. WINDOM. Yes, Congressman Roe, if I may touch on that as well, is that there's two issues. There's one that's technology-based, which is solved. The HIEs, the CommonWell platform, the Carequality platform will allow that seamless exchange of information that you speak to.

But there also is another piece, which is: The information has to be put in. And so that information has to be made accessible by the people on those networks. But we've got the technology piece solved.

So let me let Mr. Dalton touch on that as well, about some of their HIE enterprise.

Mr. DALTON. Yeah. So the answer is: Yes, it's going to happen. It's technically possible and feasible. We're going to use open APIs, fire-based integration. We're committed to that contractually.

I think the thing that will be powerful for the industry and our commercial partners will be if the DoD and the VA choose a common standard that actually will move the industry forward. Because this isn't always a technical issue; it's a standards-based issue. The power of the DoD and the VA making that choice to move it forward will actually influence the commercial marketplaces.

Now, you're talking about a little different issue, because this is a VA community provider. But, nonetheless, the tools exist—through HIEs, through direct exchange. It's a standards issue, generally speaking, in the industry. It really is.

Mr. ROE. My time's expired. I yield back.

And, Mr. Chairman, I want to applaud you and the Ranking Member for having this. And I would encourage us to do this every 90 days or whatever so we can keep everyone informed.

I yield back.

Mr. BANKS. Thank you, Mr. Chairman. We applaud you for the foresight in creating this Subcommittee and leading this conversation forward.

The chair recognizes the gentleman from Colorado for 5 minutes, Mr. Coffman.

Mr. COFFMAN. Thank you.

Mr. Windom, you started out—this organization started out in excess of 700 employees—am I correct in that?—in terms of your planning—for planning purposes?

Mr. WINDOM. Sir, the original projections were 250, augmented by the Booz Allen contractor workforce. They ballooned to about 700 as there was a thought process that we needed to bring more expertise into our portfolio, vice leverage the expertise in the existing OI&T VHA portfolios.

That is the path we're now choosing. So our numbers look like about 269 and leveraging the expertise in those portfolios I just identified.

Mr. COFFMAN. And tell me again, what are the practical effects on the project with a much smaller staff?

Mr. WINDOM. Well, at the stage we're at now, sir, where our primary focus is IOC, I think a flatter, leaner organization lends for responsiveness, lends for the facilitation of change management, especially when you're given the access that VHA and OI&T have given us to their expertise where there is no—it's a seamless inter-

action. We need this subject-matter expertise on one of our councils, and it's there to support Dr. Kroupa. We need this technological data migration expertise, and it's there to support John Short.

So having the ability to move people in and out of our portfolio is equally as advantageous as having to bring someone in off the street to orient them on the as-is environment of the VA, wonder whether they understand the Cerner solution. So we believe we've gained a tremendous efficiency by taking that approach.

Mr. COFFMAN. So part of this is that you have access to the respective agencies, the respective departments that you're serving. Has that mitigated the numbers then?

Mr. WINDOM. Absolutely, sir. That makes us seamless. You know, we're a direct report to the DepSec. There is an understanding of that.

And so the—and then the commitment by VHA and OI&T have been such that we cannot succeed without having a team concept. And that team concept involves, if you will, to use a Navy term, all hands on deck. All hands are on deck for this in support of this. This is a top priority of the Secretary, and people are treating it as such.

Mr. COFFMAN. So what do you think the—how is the culture different, organizationally, between the failures of the past and what we have today, from your perspective?

Mr. WINDOM. Sir, again, I can speak for the past 20 months, is that—

Mr. COFFMAN. Before that.

Mr. WINDOM. Well—

Mr. COFFMAN. Obviously, you studied what was there prior, because if you didn't do it, you didn't do your homework. So tell me—

Mr. WINDOM. Well—

Mr. COFFMAN. Let's go before those 20 months.

Mr. WINDOM. Sir, so I could say it in one word: team. A teaming spirit. That's what I know from DoD. That was what I believed to be part of the missing element, is a teaming spirit.

I feel that teaming spirit now. I feel people from all over the VA wanting to be part of OEHRM and wanting to be involved in this mission set. I get calls daily of people who want to join this team.

Mr. COFFMAN. Mr. Chairman, I yield back.

Mr. BANKS. We'll now enter a third round of questioning, and I'll begin with that. And we'll pick up right where Mr. Coffman left off.

Mr. Windom, in August, the VA submitted a legislative proposal to give the Office of EHR Modernization streamlined hiring and special pay authority. A few weeks later, though, the Department retracted that proposal without explanation.

Did you decide that you don't need those authorities at all, or did you find another means to accomplish them?

Mr. WINDOM. Sir, I think we have another means to accomplish it, which is: Title 38 authority rests with VHA. In sitting down with Dr. Stone, who presently leads VHA, he agreed to set up a cost pool, a cost center for us, where he would effectively take the administrative burdens off of our lap. That means we can focus more energy on the implementation, more time on implementation, vice the hiring process.

Dr. Kroupa is part of any hiring panel associated with any personnel brought through that vehicle. And, therefore, we felt we were able to get the benefits of an efficient hiring process that was already in place, influence who was hired, but not take on the administrative burden of setting up our own from scratch, if you will.

So I think that's an important efficiency. And, again, it's a byproduct of teamwork. He's taking on that burden administratively for us, but we get to reap the benefits of it from an efficiency standpoint.

Mr. BANKS. All right.

My next question is for Mr. Short and Mr. Dalton.

The contract says VA will have access to Cerner's data architecture, not just the data in the system, which VA should already own. This came out of the MITRE interoperability assessment, and VA hailed it as a big victory.

What is Cerner doing differently to give VA this access, and how is VA using it?

We can start with you, Mr. Dalton.

Mr. DALTON. Yeah. So, I mean, all I can say is we've committed to that. So we're opening that book to our architecture, what we do and how we do it, not just necessarily the data. That was something we don't normally do with our commercial clients, but we agreed to do it in the best interests of the program with the VA. So that was—I'd say that's a foot that we put forward in the interest of the program.

I'd let Mr. Short comment.

Mr. BANKS. Mr. Short, what are we doing with it?

Mr. SHORT. Our architects, engineers, and data scientists have had unfettered access to anything they've requested in this regard with Cerner. We're using that for data migration planning as well as future planning for all data interaction. We will have the Community Care partners, DoD, as well as DHS, Coast Guard.

Mr. BANKS. Okay. Thank you.

Mr. Windom, do you have—would you say that you have operational control of the VHA and OIT employees who support EHRM?

Mr. WINDOM. Yes, sir.

Mr. BANKS. Okay.

Mr. Windom, it can be difficult to direct employees who do not actually work for you. Do you consider that to be a risk?

Mr. WINDOM. It's 1 of 200-plus risks we manage, sir, as part of our program oversight efforts. So yes. But I can tell you, when you have the support of the DepSec and then the CIO and VHA, it makes it easier. And people, sir—there's a genuine commitment to do this. And people wanting to be involved and lending their expertise is something we have not had to struggle with. So we feel we've got multiple forces working in our favor.

Mr. BANKS. Okay.

Mr. Windom, where are these employees physically located? Are they in D.C.? Are they in Washington State? Or are they elsewhere?

Mr. WINDOM. Sir, we've got employees—you know, as a byproduct of the VA's strategies in hiring and supporting us, we've got them dispersed from Austin, Texas, to Seattle, to San Francisco, to

here in the D.C. metropolitan area, to Florida. You know, technology has evolved to where we're able to leverage the technological advancements to really close the distance. I believe in having critical and key members here nearby to respond to queries that you may have and other concerns from leadership. But we've been working, you know, with the challenges of distance.

We've got a hiring strategy. We've got 131 billets to fill over the next year, and so I can tell you we are looking hard at the locations of those billets, because we know where those people are located may enhance their performance. We know we need to have a presence in the Pacific Northwest. That's where IOC is. So we've started that track as well. So I promise you, we're looking at the locations of total workforce to ensure we optimize the placement.

Mr. BANKS. All right.

Mr. Windom, the scheduling system has been a persistent question. VA is piloting the Epic scheduling system in Columbus, Ohio. But Cerner provides its own scheduling system as part of the EHR. At one point, VA was considering implementing both systems in different parts of the country.

Can you comment on that a little bit further?

Mr. WINDOM. Sir, I will tell you that number one is we know we owe the legislators a response to your queries in December and that the OI&T, OEHRM, and VHA teams, you know, with the oversight of VA leadership, are working through the various course of actions that are being considered in deploying a scheduling system out of sequence of our contract.

And so I can tell you we'll be ready to brief you, as required, as to what our position is at the appropriate time. But I can assure you—

Mr. BANKS. In December?

Mr. WINDOM. Pardon me, sir?

Mr. BANKS. In December?

Mr. WINDOM. Oh, yes, sir.

Mr. BANKS. So that briefing will come in December.

Mr. WINDOM. Yes, sir. I think that decision will have been made by then and we will be prepared to brief you as appropriate.

Mr. BANKS. So, if it doesn't happen in December—which I hope that it will—at what point does this indecision either become a de facto decision or cause major problems for the EHR modernization program?

Mr. WINDOM. Sir, we've got a negotiated contract and a negotiated schedule. I will tell you that you have directed us to be ready to brief you in December, so we'll be ready in December to brief you.

Mr. BANKS. Okay. Very good.

My last question. I'm the last man standing. My time—

Mr. WINDOM. Yes, sir.

Mr. BANKS [continued].—has expired, but I'm going to ask one more question, if you don't mind.

To go back to the initial questioning with you, Mr. Windom, I'm still struggling with the budget explanation a little bit. The tangible parts of the project, like your spending to date and the infrastructure, are running below estimate, but, nonetheless, we have

the bottom line going up. It seems to be driven by intangibles and costs that come into play years from now.

We already have the cost estimate going in the wrong direction and fuzzy explanations as to why. My colleagues and I need and demand better answers, so please expect a document request for the financial records and basis of these estimates.

Can you comment any further on maybe some of those—?

Mr. WINDOM. Sir—

Mr. BANKS [continued].—as you reflected on those—

Mr. WINDOM. Sir, I will go—and I will be prepared to sit down with your staff, as appropriate, to give them a full laydown. I'll bring my chief financial officer and give you a full laydown.

We've only obligated $28 million to date in fiscal year 2019. And so I look forward to providing additional clarity to your staff for, hopefully, conveyance to you. And if you want me to come in, I gladly will. So I'll take that as a lookup, sir, and come in and brief you in great detail.

Mr. BANKS. Thank you very much.

And in closing, thank you to the witnesses for your testimony.

If there are no further questions, then the panel is now excused.

And as final closing comments, this morning we have examined many of the major questions that will determine the course of the EHRM program. The next big development should be VA and DoD determining how best to organize their joint management. They have to be close enough to act in concert while flexible enough to address their unique requirements. The Subcommittee has urged both leadership teams to communicate their thinking as early as possible.

It is my sincere hope and expectation that this Subcommittee will continue in the next Congress. And I want to thank Ranking Member Lamb for his willingness to volunteer for this unconventional assignment. We hit the ground running, and we are going to run through the tape. In my opinion, on this issue, one way to measure our success in our oversight responsibilities is if the party composition changes and no one can tell the difference.

That is not to say things won't get more difficult. On the contrary, there is every indication that they probably will. But I am committed to tackling the challenges transparently and firmly grounded in reality.

So thank you all again for your participation in today's hearing.

I ask unanimous consent that all Members have 5 legislative days to revise and extend their remarks and include extraneous material.

Without objection, so ordered.

Mr. BANKS. This hearing is adjourned.

[Whereupon, at 11:09 a.m., the Subcommittee was adjourned.]

# A P P E N D I X

## Prepared Statement of John H. Windom

Good morning Chairman Banks, Ranking Member Lamb, 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 Dr. Laura Kroupa, Acting Chief Medical Officer of the Office of Electronic Health Record Modernization (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 care delivery for our Nation's Veterans and those who care for them while being a good steward of taxpayer dollars.

### Program Milestones

VA awarded Cerner Corporation with an Indefinite Delivery/Indefinite Quantity (ID/IQ) contract to leverage maximum flexibility and the necessary structure to control cost. Through this acquisition, VA will implement the same EHR solution as the Department of Defense (DoD) to improve care coordination for Veterans and patient safety.

Since VA provided testimony on the status of the Electronic Health Record Modernization (EHRM) effort before the House Committee on Veterans' Affairs on June 26, 2018, VA has accomplished several milestones, including the award of additional Task Orders (TOs) and key events outlined below.

### Task Orders

On May 17, 2018, VA awarded the first three TOs, consisting of project management, Initial Operating Capabilities (IOC) site assessments, and data hosting. 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 more efficiently. Since June, VA awarded three additional TOs outlined below:

- 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 and deployment/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 site's 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 ob-

served and captured current state workflows; identified areas that will affect value achievement and present risk to the project; identified quick wins 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 state than initially forecasted and areas that require slightly more investment due to the age of the infrastructure. However, there were no unexpected major needs or significant deviations from the current projected spend plan.

**Model Validation Event**

On September 25–27, 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 VA medical centers. 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 closely align its workflows with commercial best practices; therefore, the Department 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, which focused on the 70 percent of the capabilities that VA and DoD have in common. The remaining 30 percent are capabilities VA requires to meet the unique needs of Veterans. The assessment revealed MHS GENESIS has an 84 percent alignment to commercial best practices. This indicates DoD has high adoption of recommendations and system configuration, which are generally in alignment with commercial best practices.

**OEHRM Organizational Structure/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. I currently serve as the program's executive director and have been supporting the effort at a leadership-level since its inception, including pioneering the acquisition of the new VA EHR solution. Prior to joining VA, I was a Program Manager for the Program Executive Office of the Defense Healthcare Management Systems (DHMS).

To ensure the appropriate VA and DoD coordination, there is an emphasis on transparency through integrated governance both within and across VA and from a decision-making perspective. The OEHRM governance structure has been established and is operational, consisting of the following five boards that will work to mitigate any potential risks to the EHRM program: (1) OEHRM Steering Committee; (2) OEHRM Governance Integration Board; (3) Functional Governance Board; (4) Technical Governance Board; and (5) Legacy OEHRM Pivot Work Group. The structure and process of the boards are designed to facilitate efficient and effective decision-making and the adjudication of risks to facilitate rapid implementation of recommended changes.

At an inter-agency level, the Departments are committed to effectively working to institute 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 interoperability objectives are achieved between the two agencies. VA 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 proactively address challenges and further reduce potential risks at VA's IOC sites. As challenges arise throughout the deployment, VA will work urgently to mitigate the impact to Veterans' health care.

**Implementation Planning/Strategy**

The EHRM effort is anticipated to take several years to be fully complete and will continue to be an evolving process as technology advances are made. The new EHR solution will be designed to accommodate various aspects of health care 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 has started the go-live clock for the IOC sites, as planned, on October 1, 2018, with an estimated completion date set for March 2020.

Further, VA is continuing to proactively work 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 their IOC sites. Several examples of efficiencies VA is leveraging include: 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, utilizing Cerner Corporation as a developer and integrator consistent with commercial best practices.

During the multi-year transition effort, VA will continue to use VistA and related clinical systems until all legacy VA EHR modules are replaced by the Cerner solution. For the purposes of ensuring uninterrupted health care delivery, existing systems will run concurrently with the deployment of Cerner's platform while we transition each facility. During the transition, VA will work tirelessly to 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 health care professionals.

**Change Management/Workflow Councils**

Understanding a significant factor of the program's success relies on effective user adoption, VA is deploying a change management strategy to support this transformation effort. The strategy includes working with end-users, beginning with VA medical center leadership; managers/supervisors; and clinicians, to provide the necessary training. In addition, there will be on-going communications regarding deployment schedule and changes to their day-to-day. VA will also work with affected stakeholders to identify and resolve any outstanding employee resistance and/or 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 a fundamental aspect in ensuring we meet the program's goals is engaging frontline staff and clinicians. Therefore, the design of the EHRCs will continue to be roughly 60 percent of clinicians in the field, who provide care for Veterans, and the remaining 40 percent consisting of those at the VA Central Office. As VA implements its new EHR solution across the enterprise, certain council members will continue to evolve depending on the current implementation location. While deploying in a particular VISN, the needs of Veterans and clinicians in that particular VISN will effectively be captured in the National workflows.

**Closing**

Again, this effort will enable VA to provide the high-quality care and benefits 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, this concludes my statement. Thank you for the opportunity to testify before the Committee today to discuss the EHRM effort. I would be happy to respond to any questions you may have.