

MISSION CRITICAL: CARING FOR OUR HEROES

JOINT HEARING

BEFORE THE
SUBCOMMITTEE ON HEALTH
AND THE
SUBCOMMITTEE ON TECHNOLOGY MODERNIZATION
OF THE
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MISSION CRITICAL: CARING FOR OUR HEROES

Wednesday, May 22, 2019

COMMITTEE ON VETERANS' AFFAIRS,
U. S. HOUSE OF REPRESENTATIVES,
Washington, D.C.

The Subcommittees met, pursuant to notice, at 10:06 a.m., in Room 210, House Visitors Center, Hon. Julia Brownley [Chairwoman of the Subcommittee on Health] presiding.

Present from Subcommittee on Health: Representatives Brownley, Lamb, Levin, Brindisi, Rose, Cisneros, Dunn, Radewagen, Barr, and Steube.

Present from Subcommittee on Technology Modernization: Representatives Lee, Cunningham, Banks, and Roy.

Also Present: Representative Roe.

OPENING STATEMENT OF JULIA BROWNLEY, CHAIRWOMAN, SUBCOMMITTEE ON HEALTH

Ms. BROWNLEY. Good morning. Thank you all for joining us today for a hearing to discuss the Information Technology systems that support two of VA's most crucial programs, the General Caregiver Support Program, and the Program of Comprehensive Assistance for Family Caregivers.

While the VA provides essential health care services to extremely disabled veterans, it is their caregivers that provide the day-to-day services needed to sustain their well-being. Caregivers are the most important component of rehabilitation and maintenance for our veterans with severe injuries and their welfare directly impacts the quality of care veterans receive.

The VA Program of Comprehensive Assistance for Family Caregivers is a one-of-a-kind in the United States. It is the only integrated program that is required to provide health care, a stipend, travel expenses, mental health care, respite care, and injury-specific training. Without these supported services, the quality of care provided by the caregiver is likely to be compromised, and the veteran is more likely to experience frequent medical complications and require expensive long-term institutional care.

Veterans who qualify for the caregiver program are medically stable enough to live outside an institution, but lack the functionality to care for themselves independently.

When the program started in 2011, it was limited to veterans who were severely injured on or after September 11th, 2001. It was estimated only that 4,000 veterans would apply: however, over

45,000 applied, clearly demonstrating the critical need for this program. Today, there are 20,000 participants.

Given the unique nature of the program and the larger-than-anticipated demand, VA has encountered several complications, including staff shortages, unclear procedures, and, the reason for today's hearing, an antiquated IT system.

For the most part, veterans participating in the Comprehensive Program have reported positively on their experience. Their caregivers are better equipped to serve the veterans and they experience fewer financial and emotional stressors due to the availability of respite mental health care and a monthly stipend.

However, in 2014 the GAO released a report highlighting the degree of ineptitude of the IT system supporting the caregiver program and recommended VA pursue a replacement system. VA concurred with the recommendations and, 5 years later, nothing has changed. It is deeply frustrating that 5 years after the GAO report these IT problems persist. It is even more frustrating that the only thing standing between pre-9/11 veterans and their caregivers and the services they need is this IT program.

With the passage of the MISSION Act, Congress finally rectified 8 years of inequality between pre and post-9/11 veterans, and made pre-9/11 veterans eligible for the program upon the implementation and certification of a competent IT system. The implementation deadline was October of 2018; VA missed this date. Due on October 1 of this year is a report to Congress that includes the system's full certification. I hope very much that VA will assure this Subcommittee of their readiness to meet that deadline and state when the first phase of veterans, those injured before 1975, will be able to apply for the program.

I had also hoped to hear from a representative of Salesforce, the developer of the off-the-shelf system VA has purchased to replace the current IT system, but to the Committee's—to my disappointment and the Committee's disappointment, they decided not to come.

What this Subcommittee hopes to learn today is twofold. The first, why after 5 years has VA been unable to replace a faulty IT system; and, second, what reassurances can you offer pre-9/11 veterans and caregivers that continue to wait for access to the care and services they need?

As our largest cohort, when Vietnam-era veterans age, the demand for long-term care will grow significantly. Without the caregiver program, these aging, severely injured veterans will require the most intensive and expensive institutional care. I would remind VA that the amount expended on disabled veterans in these institutional settings can be anywhere from \$56,000 to \$400,000 per veteran per year. The average cost to keep a veteran at home in the caregiver program is only \$19,000 per veteran per year. By providing caregivers the means to keep veterans at home with family, both the veteran and their families will live healthier lives and delay higher costs. It is simply a win-win: our veterans and their families are happy, and the VA saves a significant amount of money that can be invested into other critical veteran programs.

For decades, pre-9/11 caregivers have sacrificed their own well-being in order to support the health and well-being of their loved

ones, who also sacrificed for us and for our country. These caregivers have gained skills they never planned to need. They are the reason their children were raised with their veteran mother or father, the reason neighborhoods and communities and families stayed whole. The caregivers and our Nation's veterans, we need this program, and the caregivers and our Nation's veterans, we need this program now. We made a promise, now let's keep it.

Ms. BROWNLEY. So I understand we have caregivers in the audience today, and I want to thank each and every one of you for all of your sacrifices and for being here today for this important meeting.

I ask also for unanimous consent for other Committee Members to join the dais for today's hearing. My understanding is there are a few other members who may join us today.

And, with that, I will turn over to Ms. Lee for her opening remarks. I recognize Chairwoman Lee for 5 minutes.

**OPENING STATEMENT OF SUSIE LEE, CHAIRWOMAN,
SUBCOMMITTEE ON TECHNOLOGY MODERNIZATION**

Ms. LEE. Thank you, Chairwoman Brownley. Thank you all for being here and, most importantly, thank you to the caregivers who are here as well.

Congress has given the Department of Veterans Affairs a big mandate with the MISSION Act, because the responsibility that we have to veterans and their families is so great. They have sacrificed so much and in exchange we promise to provide them with the best health care and services we possibly can. No reasonable person can pretend that this is an easy task, but we shouldn't make it harder than it needs to be. Yet time and again we sit here and discuss failure, and we are assured that lessons have been learned and that things would get fixed, and here we are one more time.

At what point will the VA fix the systematic problems on how it buys, implements, and manages IT? When is the VA going to commit to getting it right and not make the same mistakes with weak governance, inadequate program management, and poor requirements development? Repeatedly making these same mistakes is frustrating to everyone involved and also damaging to the very people we intend to help. It is certainly incredibly frustrating for this Committee.

It is clear that there were common themes on how the VA fails at IT. At the top of the list is joint governance of IT acquisition and implementation between the Office of Information and Technology and the other VA program offices. Who is leading? Who is accountable? I have the exact same questions about every VA IT program, from Caregiver, to the GI Bill, to the Electronic Health Record Modernization.

In the case of the caregiver program, we have one system that was too small for the program; a failed effort to rescue that system; and the complete scrapping of another system after it was developed, accepted, and paid for by the VA due to problems with user acceptance testing. Now, we embark on the fourth effort to build an application with an uncertain timeline and uncertain deliverables.

This new application, the Caregiver Record Management Application, CARMA, is being developed on a Salesforce platform. It was reported last week that this platform is the subject of serious scrutiny in the technology community after improper access was given to company employees, leading to a forced widespread outage. It is unclear what the impact is to the VA, but I hope the VA and the implementing contractor, Acumen Solutions, is able to provide information about this today.

Before the platform issue was known, we invited Salesforce to testify today, but they declined to do so. This is completely unacceptable. Oversight is not optional, especially after \$10 million in three failed tries. As the Committee responsible for overseeing the implementation of VA programs, we must have a meaningful opportunity to hear from everyone involved, whether it is the VA, the IG, the GAO, veterans themselves, VSOs, and certainly the contractors that stand to profit from their work with the VA.

Furthermore, because these programs impact veterans, their families, taxpayers, public oversight of these programs is required.

I said at our recent hearing at the Forever GI Bill implementation that I hoped the VA leadership would take that IT failure as an opportunity to improve its other IT programs. I want to understand if the VA is taking that heart or if it has something substantive to offer today and how it is going to get the caregiver program back on track. Our veterans are waiting for this critical benefit, they should not have to wait even longer because the VA can't get the IT right. Let's get this right, and I hope we can have an open and productive conversation on how we can do so.

I thank all of the witnesses for being here and I look forward to your testimony.

Thank you. I yield back.

Ms. BROWNLEY. Thank you, Chairwoman Lee. And I just want to recognize the Ranking Member of the Full Committee, Dr. Roe, is here. Welcome. Thank you for joining us.

I would now like to recognize Ranking Member Dunn for his opening remarks.

**OPENING STATEMENT OF NEAL DUNN, RANKING MEMBER,
SUBCOMMITTEE ON HEALTH**

Mr. DUNN. Thank you, Chairwoman Brownley. It is a pleasure to be here today with you, and with Chairwoman Lee and with Ranking Member Banks from the Subcommittee on Technology Modernization.

We are here this morning to discuss continued programmatic and IT challenges in the Veterans Affairs Caregiver Support Program. The Caregiver Support Program encompasses a general support program for veterans of all eras and a stipend-based family caregiver program for post-9/11 veterans only. There is no other benefit like this in the government or, that I am aware, in the private sector either; it is truly unique.

Given that the VA is blazing trails with respect to this program, it is unsurprising that there would be some growing pains; however, it is disappointing that 8 years after the program was implemented the VA is still experiencing serious problems with the basic

program functions, like consistency in eligibility determinations and the lack of a functional workflow management system.

Many of the issues that we will be discussing this morning can be traced to a Government Accountability Office report that was issued in September of 2014; that is 5 years ago. I will leave it to my colleague and friend from Indiana, the Ranking Member of the Subcommittee on Technology, Mr. Jim Banks, to discuss the details of the IT system failures that bring us here today, but suffice it to say it is unacceptable that 5 years have passed and the program still doesn't have the IT system that it needs. That absence is even more concerning given that Congress required the VA to expand the Family Caregiver Program to family caregivers of veterans of all ages and eras with the enactment of the MISSION Act.

Expansion is tied to a successful deployment of the IT solution, so the longer it takes the Department to put a workable IT system in place, the longer the pre-9/11 veterans will have to be waiting to use it.

We saw the failed rollout of the Forever GI Bill last fall and how student veterans suffered when the VA rushed to put a system in place that wasn't ready for prime time; I don't want us to make that mistake again. That said, I do want the VA to recognize that tens of thousands of veterans and caregivers are relying on them and awaiting for them with an approach of this program, so I want a new sense of urgency in that.

And let me say, I am grateful to our witnesses and to my colleagues from both Subcommittees for being here this morning. And, Madam Chair, I yield back.

Ms. BROWNLEY. Thank you, Dr. Dunn.

And I now recognize Ranking Member Banks for his opening remarks.

**OPENING STATEMENT OF JIM BANKS, RANKING MEMBER,
SUBCOMMITTEE ON TECHNOLOGY MODERNIZATION**

Mr. BANKS. Thank you, Madam Chair.

The Family Caregiver Program is an important lifeline for about 20,000 post-9/11 veterans. As my colleagues have already said, Congress believed the eligibility disparity among different eras of veterans was unfair and the MISSION Act eliminates it. But like so many other key programs, the Family Caregiver Program relies on an IT system, and that system is on the rocks. If it feels like we have been here before, it is because we have.

In some ways, this is a similar situation to the Forever GI Bill and the VBA Education Benefits Processing systems, but what is different this time is that we recognize the risk in advance. Expansion of the Family Caregiver Program is phased, and it is contingent on the IT system being ready to handle it. It would be unforgivable to push through the expansion with the management capability and systems to handle it. As we have seen before, that could result in undermining the program for existing beneficiaries.

I am here to determine how close we are getting the IT system over the finish line and whether I have confidence in VA's decisions. In fact, it isn't one system, but a confusing succession of four: the Caregiver Application Tracker, or CAT, database that has been in use since 2011; the ill-fated CAT rescue between 2015 and '18;

the Caregiver Tool, or CareT, developed beginning in 2015 and abandoned earlier this year; and, finally, the Caregiver Record Management Application, or CARMA, which is just beginning.

CAT is clearly inadequate and needs to be replaced, there is no doubt about that, but I am not sure if that is because of inherent design flaws or an operational failure to maintain it and the integrity of its data.

Despite a series of staff-level meetings in preparation for this hearing, we still don't know very much about CareT. VA invested 3 years and several million dollars in CareT and expressed confidence in it, until the assessment suddenly became negative at the very end. My understanding is CareT still exists in a nearly complete state on a VA test server, but it is slated to disappear in the next few weeks.

Now there is CARMA, the latest and I hope final effort to develop a more reliable and streamlined system, this time based on the Salesforce platform. I have a lot of questions about CARMA. VA has weighed the pros and cons, and decided the new capabilities that will eventually be gained outweigh the costs of going back to the drawing board. It is a big decision and I want to make sure to understand what went into it.

I appreciate our witnesses today from VA, GAO, and the companies being here. We need to hear from each of you to understand why things happened in the past, what the significant differences are among the various systems, and what the critical path looks like to get CARMA in place to accommodate the caregiver expansion.

With that, Madam Chair, I yield back.

Ms. BROWNLEY. Thank you, Mr. Banks.

We have two panels for today's hearing. On the first panel is Dr. Steven Lieberman, Acting Principal Deputy Under Secretary for Health at the Veterans Health Administration. Dr. Lieberman is accompanied by Dr. Elyse Kaplan, Deputy Director of Caregiver Support Program, as well as Dr. Alan Constantian, Deputy Chief Information Officer in the Office of Information and Technology.

Also here today is Ms. Carol Harris, Director of Information Technology Acquisition Management from the Government Accountability Office.

I now recognize Dr. Lieberman for 5 minutes. Welcome.

STATEMENT OF STEVEN LIEBERMAN

Dr. LIEBERMAN. Thank you. Good morning, Chairwoman Brownley and Chairwoman Lee, Ranking Member Dunn and Ranking Member Banks, and members of the Subcommittee. Thank you for the opportunity to discuss—

Ms. BROWNLEY. Is your mike on, Dr. Lieberman?

Dr. LIEBERMAN. It is pushed in. You can't hear me?

Thank you for the opportunity to discuss VA's Caregivers Support Program relative to the MISSION Act of 2018 and its supporting information and technology systems. I am accompanied today by Dr. Elyse Kaplan, Deputy Director, VA Caregiver Support Program, and Dr. Alan Constantian, Deputy Chief Information Officer for Account Management and Acting Deputy Chief Information Officer, Account Manager for Health.

Since 2011, VA has provided groundbreaking work in this country to deliver unprecedented benefits and services to caregivers, so that the veterans they support may maintain their highest level of health, quality of life, and independence, and enable veterans to age in place by remaining in their homes for as long as possible. They really do amazing work.

The Program of Comprehensive Assistance for Family Caregivers is currently limited to eligible veterans who incurred or aggravated a serious injury in the line of duty on or after September 11th, 2001, and their family caregivers. Under the MISSION Act, the Program of Comprehensive Assistance will expand to eligible veterans when VA certifies that it has fully implemented the required IT systems.

Expansion will occur in two phases, beginning with eligible veterans who incurred or aggravated a serious injury in the line of duty on or before May 7, 1975, and 2 years later will expand to eligible veterans injured during the remaining eras of service.

Of note, the program of General Caregiver Support Service already available to all veteran caregivers no matter what era of service provides support such as assistance from a Caregiver Support Coordinator, training, a Caregiver Support Line, and peer support. Since its inception, VA has been optimizing the Program of Comprehensive Assistance based upon feedback from veteran caregivers, Veteran Service Organizations, and military service organizations. We also have appreciated not only input from them, but also from our Caregiver Survivor Federal Advisory Committee.

A focus for VA has been to promote accurate and consistent eligibility decision-making. Efforts under consideration are redefining eligibility requirements and creation of regionalized multi-disciplinary review teams to make eligibility and appeals decisions. The latter will enable consistency in determinations and remove medical center clinicians from responsibility from such determinations, so they instead can focus on supporting and caring for veterans and caregivers.

Other improvements under consideration to the program are providing financial planning and legal services, and modifying the stipend payment to a more equitable methodology.

Additionally, governance of the program has been strengthened by requiring every veteran's integrated service network to have a lead to monitor administration of the program, to ensure compliance with national policy and procedures, and to provide support and oversight to Caregiver Support Coordinators.

Another critical component of the success of the program is to enhance staffing. VA is increasing staffing at its medical centers and for its regional review teams.

VA recognizes our technology challenges. To better meet the program's needs, OI&T and VHA executed a strategic pivot away from a custom-developed system to adopt an industry-leading commercial off-the-shelf platform suited for this need, which can be configured to meet the specific requirements of the Caregiver Support Program.

Additionally, VA has shifted from its prior approach of seeking to deliver all desired functionality in one big release to an approached grounded in agile development, best practices for software

development in widespread use across the private and public sectors. We also designated a new role, a full-time products manager, to ensure that we build a highly-function product in an iterative manner, prioritize requirements to assure caregiver program needs are met, and ensure future expansion of the program.

The Caregiver Record Management Application, also known as CARMA, will replace the existing Caregiver Application Tracker with abilities such as managing applications, supporting administration of the Program of Comprehensive Assistance, tracking calls to the Caregiver Support Line, processing stipend payments, and significantly improving reporting capabilities.

VA recognizes the sacrifice and value of caregivers and wholeheartedly supports expansion of the program of Comprehensive Assistance to all eras of service. We remain committed to meeting the needs of its stakeholders by administering a program that is consistent in delivery, transparent in process, and more easily understood by veterans and caregivers. We have made significant progress and we will continue to work hard to build upon the improvements made thus far. We must get this right; our veterans and their caregivers deserve nothing less.

We will not expand the program until we are certain that our obligations for eligible veterans and caregivers are met. Your continued support is essential to providing the care for veterans and their families.

This concludes my testimony. My colleagues and I are prepared to answer any questions.

[THE PREPARED STATEMENT OF STEVEN LIEBERMAN APPEARS IN THE APPENDIX]

Ms. BROWNLEY. Thank you, Dr. Lieberman.

Ms. Harris, you are now recognized for 5 minutes.

STATEMENT OF CAROL C. HARRIS

Ms. HARRIS. Thank you. Chairs Brownley and Lee, Ranking Members Banks and Dunn, Dr. Roe, and members of the Subcommittees, thank you for inviting us to testify today on the IT challenges affecting VA's Family Caregiver Program. As requested, I will briefly summarize our prior related work and discuss critical factors underlying successful IT acquisitions.

As you know, the Veterans Health Administration established the Family Caregiver Program at each of its VA Medical Centers across the U.S. in May 2011. At that time, the Department implemented an IT system called the Caregiver Application Tracker, also known as CAT, to help support the program. CAT is a Web-based system that was designed to facilitate the exchange of information about approved caregivers between the VA Medical Centers and other VHA entities. However, in 2014 we reported that CAT, which is still in use today, had limitations.

For example, the Caregiver Support Program Office was not able to easily retrieve data needed to assess workload trends at the individual medical centers, such as the length of time applications are delayed or the timeliness of home visits. As such, program officials were limited in their ability to assess the scope and extent of work-

load problems at the individual medical centers and on a system-wide basis.

We noted in our report that VA had taken initial steps to obtain another IT system to support the program, but it was not sure how long it would take to implement. Accordingly, we recommended that VA expedite the process for identifying and implementing a system that would fully support the program. VA concurred with our recommendation and subsequently began taking action in 2015. These actions included steps towards implementing short-term improvements to CAT that would be followed by a long-term replacement system.

Unfortunately, VA's efforts to implement a fully capable system have been ongoing for at least 4 years and there is no end in sight. This morning, I will highlight two key points.

First, VA has undertaken two efforts, both of which have failed, and recently started a third. In 2015, VHA and the Office of Information Technology initiated a joint acquisition project called CAT Rescue to update CAT and improve the system's data reliability. This effort experienced delays and a large number of defects during system testing. VA terminated the project in April 2018.

A companion project to CAT Rescue was initiated in September 2015 to develop the Caregivers Tool, a new system to eventually replace CAT. However, system issues arose during user acceptance testing that indicated the system was not performing as expected. VA ultimately determined the system was not a viable solution and terminated work in February of 2019.

VA and OIT began a third effort in March 2019 based on an existing commercial product. This IT solution, referred to as CARMA, is intended to replace CAT, and VA has not yet established a date for completing it. We have ongoing work to evaluate the Department's efforts and expect to issue our report in early fall.

And now to my second point. There are a number of critical factors VA could adopt to increase the likelihood that the CARMA acquisition will be a success. Our work has shown that successful IT acquisitions generally have nine critical factors in common, and I will mention two here.

One is qualified and experienced program staff; this included knowledge of acquisitions and procurement processes, monitoring of contracts, and agile software development concepts. The VA has historically developed its systems in-house, and CAT, CAT Rescue, and CareT were no exception. Acquiring a commercial product will require a different set of skills that VA should ensure it can adequately bring to bear.

Another factor is testing early and often. The testing of functionality by end users prior to acceptance demonstrates earlier, rather than later, whether the functionality will meet MISSION need.

The VA would benefit from applying the critical success factors we identified. These factors can serve as a model of best practices that could help VA deliver an IT system that will effectively serve the Family Caregiver Program.

That concludes my statement and I look forward to addressing your questions.

[THE PREPARED STATEMENT OF CAROL C. HARRIS APPEARS IN THE APPENDIX]

Ms. BROWNLEY. Thank you, Ms. Harris.

And now I would like to yield 5 minutes to Chairwoman Lee for her questions.

Ms. LEE. Great. Thank you.

Dr. Lieberman and Dr. Kaplan, as I mentioned in my opening statements, I am very concerned about VA's ability to govern IT applications, and it is with all IT programs. So I want to ask on this specific program some basic questions, just quick, you know, setting the stage.

Who is accountable for this program?

Dr. LIEBERMAN. I have overall responsibility for the Caregiver Program, and for the actual IT system it is myself and Mr. Jim Gfrerer.

Ms. LEE. Okay. VA told the Committee that it was going to designate a Product Manager for CARMA; who is that?

Dr. LIEBERMAN. Dr. Constantian, can you talk about it?

Dr. CONSTANTIAN. Our Product Manager for CARMA is Ms. Ming Ligh.

Ms. LEE. And what is her—is that her title or does she have another title?

Dr. CONSTANTIAN. I know her title with respect to the CARMA project that she is the Product Manager. She is with VA's Digital Services team.

Ms. LEE. Okay. What is the OIT's role and what is Caregiver Support Program's role in ensuring the final successful delivery of an IT service, Dr. Constantian?

Dr. CONSTANTIAN. We build IT systems based on the specifications and requirements of our business partners, and testing goes in to make sure that those requirements have been understood and articulated in the IT product.

With CARMA, we are sort of doubling down on the intensification of the tastings, similar to what Ms. Harris was saying about frequent testing. So, every 2 weeks we having a sprint and for limited aspects of capability for a projected release, and that sprint is where members of VHA's Caregiver Program are working with our IT developer, Acumen, from whom you will be hearing later, and determining whether those requirements were well understood and whether that aspect of the capability is delivering what the customer is looking to receive.

Ms. LEE. Okay. So, every 2 weeks, you will have a sort of check in. And at what point—you know, I am sort of looking at what happened in the past and especially the scrapping of the CareT program—at what point are we going to be notified of possible issues?

Dr. CONSTANTIAN. We have established targets for the first two releases of discrete functionality of the CARMA product. So this is another distinction in terms of how we are moving forward with CARMA that we did not follow as rigorously in previous efforts. And so this is this agile development process where we are putting into production discrete components of what the Caregivers Program needs.

So for the first release that is projected for October of 2019 we plan to fully replace the capabilities of the CAT program. It also

because of Salesforce's inherent—well, that is the COTS product that we are using—because of its inherent utility for case management, which this really is an application of case management, the caregivers are serviced by caseworkers and customer service calls and reports and typical things are needed, we will have a full understanding probably in the September time frame as to whether the entire capability that is replacing the CAT system is in place, I would say by September, but we expect the product to be done by October of 2019.

Ms. LEE. Okay. Can I request a check-in with this Committee in September, just so we have an understanding of where that stands? Thank you.

Dr. CONSTANTIAN. Certainly.

Ms. LEE. Ms. Harris, quickly, do you see parallels right now with this governance challenge in comparison with other VA IT implementations?

Ms. HARRIS. The short answer is yes. I think having a clearly defined governance structure is very critical. The second component to that is having an adequate acquisition program baseline that fully and clearly sets out the commitments from a cost schedule and performance target basis, and have that all clearly defined and, you know, transparent to both GAO, as well as to you. That is a program baseline that we have yet to see thus far.

Ms. LEE. Okay. Thank you.

I yield.

Ms. BROWNLEY. Thank you, Chairwoman Lee.

I now recognize myself for 5 minutes.

I think the premise has been made clear that this is a critically important program, that is why we have expanded it, and we know that the demand for it is high. So, in the President's budget request for fiscal year 2020, the VA requested \$720 million to support the Caregiver Program. Included in that amount was \$150 million for program expansion efforts, but this is \$100 million less than what the CBO projected, and the Independent Budget recommended.

So how is this budget estimate arrived at, Dr. Lieberman?

Dr. LIEBERMAN. So this projection was based upon input from Milliman, who does our predicted model—

Ms. BROWNLEY. Input from who?

Dr. LIEBERMAN. Milliman. They always give us—we work with them when we are determining future enrollment or numbers. And there were many factors that went into their predictive model and that included that as the veteran aged that they would more likely be in need of caregiver services, that there would be the 2-year gap, although that didn't go into the prediction for that particular year.

Also, a big factor was that, based upon the first rollout of the Caregiver, we didn't see 100 percent of the applicants applying for the first year, it was more on the order of about 40 percent, and so that was put into the calculation also.

Ms. BROWNLEY. So you have great confidence then that this is an appropriate budget?

Dr. LIEBERMAN. So—

Ms. BROWNLEY. You are the final arbiter of that before it goes to the White House, right, for them to create their overall budget?

Dr. LIEBERMAN. Absolutely. We are—now that Dr. Kaplan and I are involved, we are actually taking another look at it—we were not involved in this previously—to make sure we agree with it. We also are working with Milliman to look at the latest numbers and see if it impacts at all on our prediction.

Ms. BROWNLEY. So, you know, in addition to \$100 million less, according to the budget submission, the Caregiver Program has yet to determine either the program's overall staffing model, or the definitions and criteria for severe injury. So I am just wondering how this third party came up with a budget without staffing levels and without this really critically important definition for serious injury.

Dr. LIEBERMAN. So we are certainly looking at the budget as we update our staffing models. We believe that the budget will meet our needs, but we are taking a serious look at staffing in both the facilities and for these regional evaluation teams. And we also believe that the final definition of a serious injury, whatever it comes out to be, that we will have adequate funding for that in the short term.

Dr. Kaplan, anything you want to add?

Dr. KAPLAN. Thank you. I would just add that we have been working with Workforce Management to predict those staffing models as well and have good confidence that we are going to be able to provide those services. One of the things that we are doing to shift the focus in some ways from just having the Caregiver Support Coordinator at each medical center is having these regional eligibility teams, and so that will take a lot of—

Ms. BROWNLEY. Thank you.

Dr. KAPLAN. Sure.

Ms. BROWNLEY. Thank you. And I just want to make sure that—do we know when the program is going to start? So you have created a budget, you have created some money for expansion, when is the program going to start? The expanded program let me say.

Dr. LIEBERMAN. We do not have a definite date yet. We are waiting for the determination on when the IT system will be fully operational.

Ms. BROWNLEY. Okay. Ms. Harris, do you think that this is the right foundation for building a budget?

Ms. HARRIS. Well, because the IT solution scope is not yet fully defined, as well as the cost and schedules, at least not to our knowledge since we haven't seen a program baseline, I don't think that the confidence in the current budget can be very high. Because, again, if the IT solution is what is necessary to expand the program, it doesn't have an adequate definition or adequate commitments locked in place, then it is not a good basis for moving forward.

Ms. BROWNLEY. Thank you for that.

My time is up, and I now recognize Ranking Member Banks for 5 minutes.

Mr. BANKS. Thank you, Madam Chair.

Ms. Harris, welcome back to the Subcommittee. We always value your expertise.

In your testimony, you outlined nine critical success factors for IT projects; which of the factors do you see present in these Caregiver system development efforts and which ones are lacking?

Ms. HARRIS. The ones that we see in terms of lacking is having program staff with adequate knowledge and skills. You know, the VA does not have the core competency in acquiring commercial products, they have historically developed their systems in house, and so that is a completely different animal from acquiring commercial product and utilizing agile development processes to do so in the configuration, as well as the customization, of the ultimate solution.

And so ensuring that VA has the adequate program management knowledge to carry out an agile development project is going to be very critical for their success.

Another key weakness is testing early and frequently. That is something that—in their previous failed efforts was something that they were lacking in. And so I am pleased that, you know, they will be going towards more modernized software development approaches in this testing early and often, but the linchpin here is really going to be whether they have the adequate experience and knowledge to be able to adequately acquire it.

Another critical success factor is also in ensuring that stakeholders are actively participating on this program and that is—you know, stakeholder involvement, not just—and through the procurement process, all the way through the development and prioritization of the requirements, and then all the way through the final delivery, that is going to be essential.

Mr. BANKS. Dr. Constantian, I understand you plan to release the new CARMA system in three phases, Phase 1 in October, Phase 2 in January 2020, and then Phase 3 at a date that has not yet been determined. I have several questions for you about that.

VA is calling CARMA Phase 1 the minimally viable product. Is it also fair to call the Caregiver Application Tracker, CAT, system a minimally viable product since you are using it now to administer the program despite being dissatisfied with it?

Dr. CONSTANTIAN. The CAT system I would not characterize as a minimum viable product. The minimum viable product as a term is used as you are building incrementally a system and adding additional functionality. Characterizing a system that is already existing and function which we do not have any plans to expand upon would not be an appropriate use of the term, sir.

Mr. BANKS. In Phase 2 of CARMA you are going to release a stipend-processing capability. Does CAT do stipend processing now? And how about CareT?

Dr. CONSTANTIAN. CAT—obviously, we have to pay our caregivers, so caregivers are paid, but that is done outside of the CAT system through a manual procedure. That is for CAT.

CareT had within the scope of the requirements that it was seeking to deliver, did have a stipend determination and payment complement to it, yes, sir.

Mr. BANKS. Okay. In Phase 3, I understand that you are going to add capability to put the caregiver application form online and make all of the enhancements necessary for the Caregiver Program to expand per the MISSION Act. That sounds like all the functions

we don't have now in CAT; would you agree with that characterization?

Dr. CONSTANTIAN. Well, yes. And Phase 3 could be in several sub-phases. We release product, consistent with agile development, we release at least every 90 days into production and put it into the hands of the Caregiver Program capabilities. So—

Mr. BANKS. So, in other words, CARMA doesn't gain functions that are fundamentally different from CAT until Phase 3?

Dr. CONSTANTIAN. No, no. No, you are correct. So, for example, Phase 2 has the stipend calculation capability that is not inherent in the CAT system, so that will be in place in Phase 2. And then the—among other things, the front end where a caregiver can make an online application, that is in—

Mr. BANKS. Okay. So, really quickly, we don't know yet when Phase 3 will begin. The staff did a demo on CAT and it is definitely a primitive-looking system. But that said, how do you justify spending probably another year on CARMA before we get anything new out of it?

Dr. CONSTANTIAN. It is precisely as the Committee described. This is such an important program, and a groundbreaking and pioneering program, that we want to make sure that the system support is absolutely capable of supporting the program without any hiccups and burps after we have launched the expansion. So it is our commitment to make sure that with CARMA our VHA business partners have 100 percent confidence in the system to do their expansion.

Mr. BANKS. Okay. My time has expired.

Ms. BROWNLEY. Thank you, Mr. Banks.

And I now recognize Ranking Member Dunn for 5 minutes.

Mr. DUNN. Thank you, Chairwoman Brownley.

Let me start with Dr. Kaplan. What percentage of those veterans currently in the program would require a nursing home if it were not for them being on the Caregiver Program?

Dr. KAPLAN. So that is a really interesting question and I think we will have to take that for the record. It is very difficult to tease apart exactly what the needs are of that caregiver and of that veteran, and so pulling the veteran out separately to—our capabilities just aren't showing that right now. So I will take that for the record.

Mr. DUNN. When we are calculating how much money we are saving with the program, I mean, that is a fundamental number we would like to have I think a grasp on.

Do you have an estimate for how many veterans might enter the program with the new expansion?

Dr. KAPLAN. We do have estimates. They range considerably and so we are working with Milliman, our actuaries, to really better define those projections. We know that as—

Mr. DUNN. Do you have an estimate?

Dr. KAPLAN. So the estimate could be anywhere from 60,000 to 100,000.

Mr. DUNN. Sixty to—

Dr. KAPLAN. Sixty to a hundred thousand.

Mr. DUNN. Sixty to a hundred thousand. Thank you.

Ms. Harris, I am not a programmer, I admire you for being one. I am familiar with the Salesforce software; I have used it in a couple different corporations. It seemed pretty comprehensive, although I think it lacked a payroll system; am I correct?

Ms. HARRIS. Sir, we currently have ongoing work to evaluate CARMA and the Salesforce solution, but at this time I am not very familiar with the current product suite of Salesforce.

Mr. DUNN. So it is really basically a fairly complex spreadsheet. And when we talk about all these programmers you need, it seems to me you might, may be aiming in the wrong direction, which you want people competent with spreadsheet development. That was my experience with it. Believe me, if I could use it well, I think you have got a lot of people back home who could probably do that as well.

Let me turn back to Dr. Kaplan again. I fear we focus so much attention, honestly, on the Family Caregiver Program that some of the services and supports that VA offers under the general Caregiver Program go unnoticed. Can you talk a little bit about what the services are that a veteran and their caregiver who are not eligible for the Family Caregiver Program might receive under the general program?

Dr. KAPLAN. Certainly. So that is something that we spend a lot of time talking about. We really want to ensure that the focus is on our general caregiver services. We provide education, training, respite, social support, and peer support mentoring to all of our general caregivers. We also provide them with self-care courses, maybe even courses and training specific to what their veteran may have, whether it is Alzheimer's disease or multiple sclerosis or PTSD.

So making sure that we have an enhanced system to provide those general caregiver services is paramount to us expanding and to being able to provide services for all veterans and their caregivers.

Mr. DUNN. And I trust we are doing outreach, so the veterans know that these services are available?

Dr. KAPLAN. Certainly. There is a Caregiver Support Coordinator located at every medical center and we are going to focus on actually having someone at each medical center to focus on general caregiver support services.

Mr. DUNN. Excellent. Thank you.

Chairwoman, one more question for Ms. Harris, if I may. You know, in the long run after the end of this—we get CARMA instituted, it is going to have to integrate with the VA EMR system, I think. Are you optimistic? Just give me some—

Ms. HARRIS. I mean, system integration and the number of system interfaces is not yet clear to us right now. I am not quite sure whether VA has adequately defined that as far as the number of systems and the—

Mr. DUNN. So that is the hot problem we have all had with our EMRs, integrating them with anything, including another EMR.

Ms. HARRIS. And it is certainly a challenge that VA will face. It is a difficult challenge across the government to integrate the system with—

Mr. DUNN. Let me thank all the witnesses. I want to say, Dr. Lieberman, we haven't had a chance to interact as much as we should have, and I would like to remedy that situation going forward. You know, obviously, the Committee and you should be having a regular dialogue and I apologize that we have not done that before. Let's make sure we do that in a somewhat less stilted fashion.

With that, I yield back. Thank you.

Ms. BROWNLEY. Thank you, Dr. Dunn.

And I now call on Mr. Lamb for 5 minutes.

Mr. LAMB. Thank you, Madam Chairwoman.

Ms. Harris, you highlighted the difference between the VA buying an off-the-shelf solution with this new product versus what they were doing before, could you explain in just a little more detail the difference between those two things from the VA's perspective? Like were they themselves really developing the software solution before or how are those different?

Ms. HARRIS. My understanding is that for CAT, CAT Rescue, and CareT, VA was developing those solutions in house; those were not based on commercial platforms or commercial products. The CARMA solution is based on a commercial product. So the difference being, because the previous solutions were developed in house, they had coders and engineers, folks responsible for developing that software, now in this different paradigm, you know, this acquiring a COTS product, they are going to have to—they won't be the developers anymore, they will be overseeing contractors who will be responsible for the configuration and the customization of that product.

And so they will be responsible for contractor insight and ensuring that they have the right end users that have a frequent dialogue with those software developers to ensure that when these short sprints or product releases are released into the environment that it has been adequately tested and all the kinks have been resolved. And so it is a different animal from actually being the developers themselves.

Mr. LAMB. That sounds to me very similar to the way that Vista was developed in house within the VA for medical records—

Ms. HARRIS. Correct.

Mr. LAMB [continued].—and now we are moving to Cerner; is that a fair analogy for the two situations?

Ms. HARRIS. Yes, sir.

Mr. LAMB. Okay. Dr. Constantian, I see you nodding your head. How long have you been at OIT?

Dr. CONSTANTIAN. I have been in OIT for about 7 years.

Mr. LAMB. Okay. Why are we making this move in both cases, in your opinion? Do we not have the in-house talent in the VA to work on these programs themselves, or what is with the shift in thinking here?

Dr. CONSTANTIAN. Congressman, we back in 2016, under the leadership of LaVerne Council, moved toward a philosophy of moving to COTS and strategic sourcing, which our current CIO, Mr. Jim Gfrerer, heartily endorses.

Part of the reason for that, it is not necessarily internal capability, it is the ability to share development costs with the private

sector who are building products that are adaptable in the VA environment. So we are following the same approach with CARMA by adopting Salesforce that we did by adopting Cerner for the electronic health record, and that is benefitting from industry-wide best practices in a particular area and then making configuration changes of that COTS platform to suit specific VA needs. So it is a move toward COTS as a philosophy of, you know, buying COTS first where COTS is suitable for the solution.

Mr. LAMB. Okay. Now, in both cases, obviously one of the big concerns is how we are going to hold the contractor to some sort of time line and result-oriented standard, but it sounds to me like as we sit here right now we really don't have any idea when this new product is going to be ready to go; is that a fair statement?

Dr. CONSTANTIAN. So, with agile development, you capture different user stories and epics, and basically bundles of functionality that you want to deliver. So we have pretty well fixed the first two bundles of functionality, the first one replaces completely—

Mr. LAMB. I hate to cut you off, but we are running out of time. As we sit here today, the people that you have contracted with for this new system, do they have a concrete deadline as to when it has to be ready, at least for its first phase?

Dr. CONSTANTIAN. For the first phase, our planned target, and we have good confidence in it, is that we will have that in October of 2019.

Mr. LAMB. Is that a contractual deadline that they are bound to?

Dr. CONSTANTIAN. I do not believe so.

Mr. LAMB. Okay. So I just want to be clear, because obviously there are real families behind this situation and these are older families, because we are expanding this program to people from pre-9/11, so Vietnam era, many of them, they and the people that they are caring for don't have very much time left in a lot of these cases.

So if I am asked by one of them at home, which I often am, I heard we were getting these benefits, where are they, I am in a position right now to say that we have contracted with someone to fix this, but they are not held as of right now to any actual deadlines; is that right?

Dr. CONSTANTIAN. We are expecting them to deliver the first phase in October. I will have to get back with you for something on the record as to whether there is a contractual basis for holding them accountable to particular phases of the development.

Mr. LAMB. Thank you. I am out of time.

Thank you, Madam Chairwoman.

Ms. BROWNLEY. Thank you, Mr. Lamb.

And I now call on Dr. Roe for 5 minutes.

Mr. ROE. Well, thank you. I won't be long, Madam Chairwoman, I don't think. And certainly I have difficulty turning an iPad on, so I know the complexity of this has to be—you have got a lot of smart people trying to make it work, but to Mr. Lamb's point, the veterans out there really don't care. What they want to know and what I would like to know is, when are we going to sign the first one up? When can the first pre-9/11, my generation—and I noticed Mr. Lamb looked around when he said, you know, some of us

weren't going to be around long, he was looking at me when he said that—

[Laughter.]

Mr. ROE [continued].-but, seriously, when can we go home to our constituents, because we get asked this all the time—they know it has passed, many people know, and we had a lot of stakeholders put a lot of effort, the Dole Foundation and others, into getting this done, and he is correct, this is affecting a generation that are dying at hundreds per day.

Dr. LIEBERMAN. We want to get this done as quickly as we can also. This is such a critical program, as you state. We do not have that date; we are unable to commit to that date yet.

Mr. ROE. Okay. So we don't know when that will be.

The other thing, and Ms. Brownley was on to this, and when you were estimating—and I will give the VA an A-plus—when three ADLs were used, you all estimated almost to—I mean, it was amazing how close you got to around 5,000 veterans that would be using this caregiver program, but when it was liberalized to one ADL, that is when the number went up to around 20,000. I just did some tabletop math here, pretty simple math, we are spending \$20,000 per person, and 60,000 is a \$1.2 billion program, not \$150 million. It is almost ten times what we have—and if it is north of that, 100,000 people, we are looking at \$2 billion.

So the estimate, as best I can tell, is way off. Unless we don't implement the program where you don't spend any money except on technology, it is not working.

So am I wrong there?

Dr. KAPLAN. So I can appreciate that. And so part of that is that we are planning for a 40 percent ramp-up for the first year. So 40, 70, and then 90 percent for the following year. The other pieces of that being that, you know, we are reevaluating those numbers, because I think we want to make sure that the considerations for those numbers and projections are just and are sound. And when we do have—one of the other reasons I think that there is so much flexibility and disagreement in the numbers is simply because we have not standardized our decision-making in terms of eligibility to the extent that we need to, and that is part of our regional eligibility teams. So being able to standardize our decisions that much more.

Mr. ROE. I certainly know when Dr. Shulkin was testifying, I remember the hearing we had last year when he was talking about—even before we passed the MISSION Act, he was talking about using three ADLs, which I supported; I think that is what the industry standard is, but right now it is one. And I just quickly did—I wasn't very good in calculus, but I was pretty good in arithmetic, and if you look at 40 percent of the low number, that is still almost a half a billion dollars. So we are—I think Ms. Brownley is on to something, we have grossly underestimated what this is going to cost.

And I think back to the frustration that this Committee has, we look at the—and one of the concerns, I mean an absolute red flag in front of the bull that I saw out in Spokane a year and a half ago when I was out there was how the IT program with Cerner was rolling out. And then we see the Post-9/11 GI Bill roll out, that

is supposed to be by December of 2019 up and functioning, and I am not convinced it will be. And we specifically put in law that we would not go live with this program until you all, the experts, can certify the IT program. So that holdup of the IT is keeping a lot of World War II vets, Korean War vets—think about that when you go home tonight, the elderly people that desperately do need this, think about that.

And I yield back.

Ms. BROWNLEY. Thank you, Dr. Roe. And I now recognize Mr. Levin for 5 minutes.

Mr. LEVIN. Thank you, Chair Brownley. As Dr. Roe said, we all have huge numbers of veterans in our communities, in my district, in San Diego, and I am very troubled when I hear about these IT issues. I chair the Economic Opportunities Subcommittee and we just had another joint hearing with the Technology Modernization Subcommittee where we learned about other IT implementation problems with regard to the GI Bill and benefits there.

And I am trying to understand how we can prevent this from happening in the future, what proactive steps you are taking. And, you know, here we are examining more than 8 years of fruitless efforts to develop a caregiver eligibility tool and management system. Several questions for a couple of you.

Dr. Constantian, what lessons would you say OIT has learned in the last 8 years that are reflected in your current approach with Salesforce and Acumen?

Dr. CONSTANTIAN. I think one of the lessons that we have learned is to not assume that we fully understand the requirements without having extensive dialogue between our developers and our IT staff with our business partners. It is one thing to write down requirements, just like in any kind of communication. It is one thing for somebody to try to convey a meaning. It is another thing for another party to understand that same meaning and be on the same page. So I think that is something that we have learned.

The second thing I think we have learned is that in terms of process, saying that we are doing—following an agile format and actually doing it, as we are doing with CARMA now with two week sprints. Checking in regularly with the customer on smaller elements of functionality, I think, is a lesson learned and something that we're doing better now than we did in the prior attempts.

Third, I think that the practice of committing on the part of both the business partner and the IT organization, to put some level of capability into production and using it, which we are doing with the Phase 1 of CARMA in October, where we will discard CAT and we will build from this new Salesforce platform, KARMA, and then incrementally build and add additional functionality is something that we did not do with CareT that we are doing.

And then a third item is having a product manager, which we have not had. We have had more of a hands off project management, letting the contractors work more directly with the business. We are very involved now. The development team is very involved in the process. Ms. Lee is intimately involved with what is going on. So that is a practice that has improved.

And I think in terms of technology, when we kicked off CareT in 2015, because there were two contractors involved with CareT, we had to stop the development of one contractor of CareT which was ManTech, because what we were expecting to be delivered under CAT rescue, which was a dependency, didn't come across in time. What we have learned is that technology improves and Salesforce, now, we had a—in 2019, we had a BPA available for Salesforce that we could move to. And so to take advantage of strategic sourcing opportunities, I think, are other things that we have learned.

Mr. LEVIN. So I wanted to dig into CareT with the time I have left, and I also was not great at calculus, but pretty good at arithmetic. Three years, \$7 million were spent for CareT's development. Contract awarded to ManTech, as you said, September 2015. And then in July 2017, an additional \$4.3 million contract was awarded to AbleVets to fix various defects.

And in their written statement, AbleVets indicated they delivered a working product earlier this year. However, they were then informed that the department was completely scrapping the CareT system. So Dr. Lieberman, do you agree with AbleVets' evaluation of their results and what was the VA's reasoning for tossing the CareT system after investing \$7.3 million?

Dr. LIEBERMAN. First and foremost for us was expansion of the program. And we wanted to have confidence in the product that we were using. We were seeing—from the business side, we were seeing too many defects and we did not have confidence week after week. We were being told that we were going to have the finished product, but we were not convinced, and we felt like we had to know that we had a product that we could build upon that was going to be successful. And so we looked towards our colleagues in information technology, and their recommendation was that we go with an off-the-shelf product. And after reviewing, we agreed that we wanted to be certain moving forward we were going to have the right product.

Mr. LEVIN. Well, I am out of time. Obviously, we want to try to avoid wasting millions and millions of our veterans' dollars in the future and I look forward to hearing from you and seeing what kind of changes you will make to avoid this from happening again. Thank you.

Ms. BROWNLEY. Thank you, Mr. Levin. Ms. Radewagen, you are recognized for 5 minutes.

Ms. RADEWAGEN. Thank you, Madam Chairman, and I welcome the panel. My question is for Dr. Constantian. How do you rank the caregiver IT systems in terms of complexity and difficulty, compared to the other IT systems the Committee has examined recently, like the decision support tool for community care and the long-term solution for the forever GI Bill?

Dr. CONSTANTIAN. Congresswoman, I—it would be a subjective guess and I don't really have a good basis for comparing the complexity of the three systems.

Ms. RADEWAGEN. Okay. So here is another one. So VA has repeatedly stated the current system, CAT, is not able to scale up to handle the increased numbers of veterans and caregivers under the caregiver program expansion. Can you explain why that is?

Dr. CONSTANTIAN. Well, CAT was only developed to accommodate 5,000 records. It's accommodating now I think about 20,000 active caregivers and has more records in the archive. We do not believe the current technology is capable of expanding beyond that, which is part of the reason why, based on our own assessment and GAO's recommendations, we moved to a solution CareT, and now CARMA that is scalable to whatever the expansion is that we finally wind up with the MISSION Act expanded program.

Ms. RADEWAGEN. Thank you, Madam Chairman. Yield back.

Ms. BROWNLEY. Thank you, Ms. Radewagen. Now, I am calling on Mr. Cisneros for 5 minutes.

Mr. CISNEROS. Thank you, Madam Chairwoman. Ms. Harris, in your testimony, you identified nine critical success factors that are consistent with leading industry practices for IT acquisition, and you highlighted two of them, program staff and active engagement of program officials with the stakeholders. Is the VA following these nine critical success factors?

Ms. HARRIS. I can't tell you that at this time. We have ongoing work to evaluate the current efforts with this third effort. And so we intend to report back to you with the final report in early fall.

Mr. CISNEROS. Have they followed them in the past?

Ms. HARRIS. No, they have not.

Mr. CISNEROS. Dr. Constantian, I am sorry if I said it wrong, are we testing the CARMA program?

Mr. CONSTANTIAN. Yes, frequently. As I had mentioned, at the end of each of the two week epochs, Acumen is working with the testers, with VHA and the caregiver program to make sure that that discreet bundle of functionality we have gotten right.

Mr. CISNEROS. And how are the tests going? Are they being successful?

Dr. CONSTANTIAN. My understanding is so far things are looking good.

Mr. CISNEROS. Sir, are you getting reports every two weeks as far as that testing and how it is going, or are you just assuming right now that it is, like you said, under your understanding, it is going well?

Dr. CONSTANTIAN. We are getting weekly reports from the product manager.

Mr. CISNEROS. All right. So my question is we have had problems with implementation before, what has changed this time around to make us think that we can get CARMA implemented and have it by October of 2019, as you are saying it will be done? What has changed?

Dr. CONSTANTIAN. Well, it is the—the first phase of CARMA will be done by October of 2019. So I think three things have changed. I think—and I would characterize them as people, process, and technology. Those are the three elements of the change.

In terms of people, we have, as I had mentioned earlier, a product manager who is very intimately involved with the development and the testing of the product on a weekly basis, and this is the person from whom we get weekly reports.

In terms of process, we are more intentionally using an agile development program where we are—and part of it is that 2 weeks testing of each incremental sprint, but also it is putting into pro-

duction for general use phases of functionality. Phase 1 is replacing CAT, which provides reports, registers people who are in the caregiver program, takes information on what is coming from the caregiver support line and from the caregiver support managers.

Phase 2, targeted for January of 2020, doing the automated stipend processing. So those are the process elements using this more agile development—deliberate agile development process.

And then finally in terms of technology, using Salesforce as an out of the box capability, a cots capability that is applicable to this kind of IT solution has to be customized, because as the Committee has very correctly noted, this is a pioneering program. There is no other similar benefit in government or the private sector. You are absolutely right with that. So there has to be some customization. But Salesforce brings out of the box capabilities in terms of reporting that we did not have in a custom developed system that we have had in the past.

So that for people, process, technology, those are things that give me confidence that we will be successful with CARMA.

Mr. CISNEROS. So we are testing the other phase outs too? So Phase 2 is being tested, as well as the current Phase 1. And then after Phase 1 is done, we will make sure that, or are we waiting for Phase 1 to be completed before we start testing Phase 2?

Dr. CONSTANTIAN. Some work is being done on Phase 2 in terms of understanding the requirements, but sort of the—as you are writing code, any changes in the code can impact on the tests from the previous code. So you have to do regression testing. And so you really can't declare something. You can't in parallel complete testing for future phases until you have completed it sort of serially in Phase 1 and Phase 2. So there is work being done with Phase 2 right now in terms of understanding the requirements, but the testing focus is on Phase 1.

Mr. CISNEROS. Well, I have my fingers crossed that this is going to work, Phase 1, because a lot of people are depending on this and I hope it does. With that, I will yield back my time.

Dr. CONSTANTIAN. I hope so too, sir.

Ms. BROWNLEY. Thank you, Mr. Cisneros. Mr. Barr, you are recognized for 5 minutes.

Mr. BARR. Thank you, Chair Brownley. And thank you for holding this hearing to shine a light on the serious problems that we have experienced in the rollout of the IT systems associated with the Family Caregiving Program.

And as I sit here and I listen to the testimony here today, I can't help thinking about the veterans I have a privilege to represent and what they would think if they were sitting here listening to this today. And unfortunately, and excuse me if this sounds harsh, I know these men and women. And I think if they were sitting here today listening to this, they would say, "Wow. This is a program that is replete with waste, mismanagement, and poor performance." And that is harsh and I am sorry to have to say that, but I know the veterans I represent and I think they would be very disappointed to hear that after 8 years and three failed efforts, and scrapping of CAT Rescue, and CareT after an initial round with CAT, and now moving into CARMA with no end in sight, and mil-

lions of dollars of taxpayer investment now totally a sunk cost, I think our veterans would be extremely disappointed.

And by the way, not just those pre-9/11 veterans who are now supposed to be eligible but can't access the services that Congress intended to provide for them, but I also worry about the post-9/11 veterans and their caregivers, who I am not sure they are getting the services that they have earned either.

And so let me first ask that question. And let me stipulate upfront. You all are the experts. By far, I am not an IT expert, so I will defer to your expertise, but I want to know for the post-9/11 veterans and their caregivers, how has this repeated failed effort to implement the IT systems, how has that lack of capability impacted the post-9/11 veterans and their caregivers? And I will start with Dr. Lieberman on that point.

Dr. LIEBERMAN. It has really not had an impact. The program has been successful. Certainly, it would be more helpful for us to have better data reporting analysis of how the program is going, but we are still enrolling veterans. We are still getting applications and we are still enrolling veterans. And we are, based upon having caregivers support coordinators at each facility, putting a lead in our networks, we are keeping a close eye on how the program is going and we are making sure that our caregivers are getting the services that they need to serve their veterans.

Mr. BARR. Well, I certainly hope that is true, especially with the initial round of veterans who are supposed to be getting these services. But, Dr. Lieberman, as a follow up, let's talk about the MISSION Act and the rest of the veterans—the pre-9/11 veterans who are supposed to be receiving these services. And I want to be absolutely sure I understand this. Is it accurate that it is necessary to complete Phase 3 of CARMA—of the CARMA system before the Family Caregiver Program can expand?

Dr. LIEBERMAN. That is correct.

Mr. BARR. Okay. So that is the group that is really being negatively impacted by all of these delays and these failed efforts; is that a fair characterization?

Dr. LIEBERMAN. Yes, the pre-9/11.

Mr. BARR. Okay. Let me ask you this. So CARMA is going to be an off-the-shelf application; is that right?

Dr. LIEBERMAN. Yes.

Mr. BARR. Okay. Why didn't we, and the VA in general has moved to an off-the-shelf—commercial off-the-shelf IT mentality, Dr. Constantian. Why didn't we have that approach to begin with? Why didn't we use that approach to begin with?

Dr. CONSTANTIAN. Congressman, in retrospect, maybe we should have, but in 2015—so where we were in 2011 was a product was very quickly built to conform with the 2010 legislation that provides some kind of IT support in 2011. That was CAT. So in 2015, with CAT Rescue, which was a short term fix of some of the shortcomings of CAT and then CareT, we went down what in 2015 was our sort of normal operating procedure, which was to do custom development.

In 2017, after we did not have the database that the original contractor, ManTech, for CareT needed to continue, we awarded a contract to AbleVets, but based on taking over the ManTech Solutions.

So the 2015 decision on how to do the solution sort of stayed with us until early 2019 when we moved to Salesforce.

Mr. BARR. My time has expired, but I do worry that Ms. Harris and the GAO is telling us that the VA lacks the competency and experience to acquire these commercial products. So I do hope the commercial off-the-shelf, the move to that is better than the previous efforts. I yield back.

Ms. BROWNLEY. Thank you, Mr. Barr. And just before I excuse the panel, I just want to make one final remark and when we passed the MISSION Act, it was very clear with this Committee that our intention and motivation was to expand this program to every single veteran in our country and their families who is deserving of it and meets the qualifications. And I will say what I said in my opening comments, I will conclude here, is that if there is any effort on the VA's part to try to reduce this program to squeeze it into a budget that I believe is underfunded, this Committee is going to be very, very angry. I just want to be abundantly clear.

And we have to look at this holistically because the caregiver program is a win/win situation. It is what our veterans want. It is what their families want, and it is cheaper for us to do. So it makes no sense not to be in a situation where we want to do everything possible to expand upon this program, particularly as we will be facing our aging Vietnam veteran population. It is only win/win for everyone.

So I know you all have a lot of work to do to make this right. I appreciate you being here and participating today. And I would now like to move onto our next panel. Thank you very much.

Well, we will begin. Well, welcome, our second panel. And on our panel this morning, we have Dr. Wendell Ocasio, chief medical officer of AbleVets, and Mr. Ken Beecher, director of Acumen Solutions. Dr. Ocasio, you are now recognized for 5 minutes.

STATEMENT OF DR. WENDELL OCASIO

Dr. OCASIO. Chairwoman Brownley, Chair Lee, Ranking Member Dunn, Ranking Member Banks, and distinguished members of the Subcommittees, thank you for this opportunity to testify today. My name is Wendell Ocasio. I am a chief medical officer of AbleVets, a certified Service-Disabled Veteran Owned Small Business specializing in cybersecurity, agile engineering, analytics, and technology enablement solutions for government.

In summary, AbleVets was awarded the CareT contract on July 5th of 2017. The original requirement for the 10-month base period was for AbleVets to start with an existing CareT application code base, implemented a defined set of additional application requirements, migrate data from the CAT Rescue into the CareT product, test the final product, and deploy into production. And there were two 12-month optional periods focused solely on sustaining the CareT application code once deployed into production.

AbleVets was obligated 3.5 million over a 23-month period, successfully completing and delivering the base period requirements. The government accepted the deliverables and issued a satisfactory performance rating.

I will now briefly walk through the timeline of events that we provided in our written testimony.

Upon award of the contract in July 2017, AbleVets was provided the existing CareT source code and supporting files that were developed under a previous contractor. We made modifications to this code to implement the additional requirements documented in the VA-approved requirements backlog.

In August of 2017, AbleVets began the efforts to migrate data from the VA's transitional tool, CAT Rescue, into CareT. The CAT Rescue effort was performed by a separate contract. CAT Rescue contract experienced delays and eventually in

April 2018, VA decided not to deploy CAT Rescue. Based on the new plan, our data migration requirement shifted to migrating data from CAT instead of CAT Rescue. Because of this change, VA exercised a 4-month cost modification to our contract, resulting in the target date for completion of CareT being extended to September 4, 2018.

In August of 2018, VA issued a new requirement consisting of changes to a specific piece of functionality that had been completed under the previous CareT contract. This piece of functionality provided a portal interface to allow the veterans and caregivers to complete online application.

When VA directed the implementation of this new requirement in late August, they awarded AbleVets a 3-month cost-modification to the contract, providing us to complete this new requirement, and as a result extended the target date for completion to December of 2018.

In late November of 2018, upon completion of the new portal requirement, AbleVets had still remaining data migration to complete. The migration effort had taken longer than estimated due to the need to come up to speed on the CAT database, since the data model was significantly different than the initially planned CAT Rescue. We agreed to a no-cost extension to allow time for the data migration to complete. This moved the target date for completion to February 28th of 2019.

We began end to end user-acceptance testing in November of 2018. Throughout this testing, AbleVets worked closely with VA to identify any issues identified by the testers and

categorized them as application defects or issues representing additional requirements beyond the approved baseline. We resolved defects in parallel with continued user-acceptance testing.

In mid-January, we were informed by the VA program management that they decided to pause further testing. During this pause, we continued to resolve open defects that had been identified to that point. By mid-February, AbleVets had resolved the identified required defects and completed the data migration efforts.

At that point, we were informed by VA that the Department had chosen not to proceed with deployment of CareT and were not going to exercise the sustainment optional task. Instead, the exercised the "Transition Out" optional task, a 90-day knowledge transfer and close-out period. We have successfully performed transition activities, have had all contract deliverables and invoices approved, and are on target to end support on May 28th of 2019.

Thank you for allowing us to testify today and I look forward to answering any questions you may have.

[THE PREPARED STATEMENT OF DR. WENDELL OCASIO APPEARS IN THE APPENDIX]

Ms. BROWNLEY. Thank you, Dr. Ocasio. And Mr. Beecher, I now recognize you for 5 minutes.

STATEMENT OF KEN BEECHER

Mr. BEECHER. Good morning to all members of the House Veteran Affairs Committee and Subcommittee. Thank you for the opportunity to discuss VA's caregiver development

contract using the Salesforce platform. My name is Ken Beecher and I am a Director at Acumen Solutions with responsibility for the delivery and execution of our projects at the U.S. Department of Veterans Affairs.

Acumen Solutions is a global consulting firm that helps Fortune 1000 companies and government agencies anticipate and respond to their customers' needs with innovative cloud-based IT solutions. We were founded in 1999, and our primary focus is to build mission-based systems that strengthen customer relationships. As an industry leader, we partner with some of the brightest innovators in cloud technology, such as Salesforce, to create exceptional solutions for our customers. It is our robust experience, innovative strategies, and a commitment to see our customers succeed that make us a trusted and proven leader in cloud computing.

Acumen Solutions is one of Salesforce's global strategic partners, the highest tier in the Salesforce partner ecosystem. We have completed over 1,800 Salesforce projects across our commercial and public sector practices. We have worked in nearly all the Federal cabinet agencies, including VA, and are proud of our outstanding customer satisfaction rating. In short: we pride ourselves in bringing value to our customers and those they serve.

In September 2018, we were awarded a blanket purchase agreement, called VA Enterprise Case Management Solutions or VECMS. This vehicle provides the VA with easy access to Acumen Solutions' professional services to implement Salesforce's technology platform for any department within the VA. In March 2019, VA tasked Acumen Solutions with developing a level of effort for a minimum viable product, the MVP, for the Caregiver Record Management Application project, known as CARMA, under the VECMS contract.

The Caregiver program is an important subset of the MISSION Act, which was passed to improve the VA's ability to deliver health care to our veterans; and CARMA is a subset of the Caregiver program.

In April 2019, VA awarded Acumen Solutions the CARMA Phase 1 minimum viable product task order in the amount of \$3.8 million to perform implementation and integration services. The scope of the Phase 1 MVP is to replace the existing system, the Caregiver Application Tracker, CAT, used by the Caregiver Support Program with an application built on the Salesforce platform. The new system will have improved functionality to process and manage the applications, allow for manual determination of eligibility, provide

improved program monitoring and tracking, and capture call records and referrals by the caregiver support line.

On Monday, May 20th, after I had submitted my written testimony to the Committee, the VA sent us a letter of intent to exercise an optional task for CARMA Phase 2, Office of Community Care Stipend Payments, in the amount of \$1.8 million.

The scope of Phase 2 is to configure the CARMA module to support the stipend payment calculation and associated tasks, such as discharges, reinstatements, and reissues. We recognize the VA's pressing need to develop and build its information technology systems at less expense and with the Nation's veterans at the center.

Acumen Solutions is using the Agile SCRUM software development methodology to build the CARMA solution, which enables us to rapidly build Salesforce solutions using

configuration while minimizing custom code. Furthermore, we employ a user centered design methodology with close consultation with the U.S. Digital Services, USDS, meaning that we meet with users of the system to understand their needs and pain points, and then create artifacts, such as prototypes and journey maps, which are then shared with the configuration team.

Our configuration team then works in a 2-week sprint, ending with a demonstration of what was built for immediate feedback. To mitigate risk, we provide VA end-users access to a test environment with the latest application code, so they can interact with and test the functionality independently. Each sprint builds on the previous one until we reach a completed solution. Our methodology lowers the risk to the VA and to the taxpayers by developing pieces of the overall solution in bite size increments. In addition, we work with the users throughout to constantly confirm that each stage of development meets their acceptance criteria.

Our success to date in configuring Salesforce and replacing legacy systems at VA, are a result of collaboration with the VA business office and its associated product owners, USDS, the VA Digital Transformation Center, OI&T, the Technology Acquisition Center, and the Salesforce Program and Business Architects working at the VA.

Acumen Solutions is proud to partner with the VA and Salesforce to provide an innovative, effective solution to assist the VA on behalf of our Nation's veterans and their caregivers.

Thank you. I look forward to your questions.

[THE PREPARED STATEMENT OF KEN BEECHER APPEARS IN THE APPENDIX]

Ms. BROWNLEY. Thank you, Mr. Beecher. Thank you for your testimony and I now recognize Chairwoman Lee for 5 minutes.

Ms. LEE. Thank you. Thank you for being here. Mr. Beecher, I wanted to ask you. When does the contract require you to deliver the minimally viable product?

Mr. BEECHER. In our task order, our goal is to implement the solution by October 31st.

Ms. LEE. Is that contractually required?

Mr. BEECHER. We have the flexibility to postpone that based on Ms. Harris' critical success factors. So if those nine components,

and potentially more, happen then we can't be beholden to if something gets delayed on VA's behalf.

Ms. LEE. So if the VA does not implement all nine of those success factors, you are not contractually required to deliver-

Mr. BEECHER. No.

Ms. LEE. Nothing?

Mr. BEECHER. No, I misrepresented. No. It is important that those nine factors are mitigated and managed too, but it doesn't have to be 100 percent.

Ms. LEE. So when—contractually, when is the deadline for you to deliver a product? You have none?

Mr. BEECHER. We don't have a contractual-

Ms. LEE. It is a rolling—it is just a rolling deadline?

Mr. BEECHER. Well, our goal is to deploy it by October 31st.

Ms. LEE. But it is not contractual? There is no repercussions if you don't do it?

Mr. BEECHER. No.

Ms. LEE. Okay. So what is your confidence level on the ability to deliver by October 2019?

Mr. BEECHER. I have a high degree of confidence that we will be delivering.

Ms. LEE. A hundred percent? Ninety?

Mr. BEECHER. I would say 95 percent, close to 100. Yes.

Ms. LEE. Will—so Salesforce, I just have a question about what is their role in the implementation?

Mr. BEECHER. So Salesforce has dedicated architects at the VA that support each of the Salesforce projects there.

Ms. LEE. Okay. Dr. Ocasio, I wanted to switch to you. So throughout your contract period, did the VA indicate any time that your development was not going in the right direction?

Dr. OCASIO. Not in a broad sense. We had some issues that were identified during the testing. That is kind of how testing goes. You test so that you can see the issues. And we were addressing them and categorizing them as these were really new requirements. These were really misunderstanding of the requirements. These were issues that were planned for a future release, or these were the issues that we were going to fix, and we would fix them as we would go along.

Ms. LEE. Okay. Can you explain the issues that were brought up?

Dr. OCASIO. I mean, there is a variety of things. Like sometimes they said we wanted this particular—if something is in a queue and then you press a button, and then something happens, and automatically it needs to be in this other queue, specific business rules like that. Sometimes they said, "Were you expecting it in a different way?" And that is when you do the analysis to say, "Wait a minute. This is how it was supposed to be," or, "No, this was a misunderstanding. Let's go ahead and fix it."

Ms. LEE. Okay. How much did the VA pay you before the system was completely discarded?

Dr. OCASIO. Yeah. The total testimony at 3.5 million.

Ms. LEE. Okay. All right. I am finished. I will yield.

Ms. BROWNLEY. Thank you, Ms. Lee. Mr. Lamb, I recognize you for 5 minutes.

Mr. LAMB. Thank you, Madam Chairwoman. So Dr. Ocasio, were you surprised when your relationship with the VA came to an end earlier this year?

Dr. OCASIO. In para-government, we see often that plans change, and things move in a different direction. The government has all of the opportunity to make decisions in that regard, and we completed the base period. So when there was a decision to not to proceed, not completely surprising. It is not necessarily absolutely expected. It certainly wasn't expected like that, but we have seen changes like that before. This is how the business is and we are at the pleasure of the government of whatever they want to do.

Mr. LAMB. Were you given any indication throughout the development process that they weren't happy with the product you were creating?

Dr. OCASIO. Other than when there was a pause, obviously, there seems to be something going on in terms of there was a concern and they were looking at alternatives, but when we were notified, I was—from the perspective of, “We chose to go in a different direction.”

Mr. LAMB. Do you believe that your product could have handled the increased demand of the expansion of the Caregiver program? We were given an estimate earlier that it could be 60,000 to 100,000.

Dr. OCASIO. Yeah. It was engineered to scale in that regard.

Mr. LAMB. Okay. Thank you. Mr. Beecher, you have a goal of October of this year. You are not bound to it legally for any reason. Just in other situations that you have worked on, other projects you have worked on, have you had contracts that have bound you to a date for development of one of these IT products?

Mr. BEECHER. I will have to get back to you with that one. I am not sure about as far as all of the projects that Acumen has. I am just familiar with the projects that we have at VA.

Mr. LAMB. I just mean the ones that you have worked on.

Mr. BEECHER. The ones I have worked, my apologies. There is always flexibility with each of our contracts because of the growing need and demand of those requirements. But at the end of the day, we always try to deploy a minimum viable product by that target date.

Mr. LAMB. Okay. I guess what I mean is I understand there is always flexibility some time. Is the flexibility always on the date or do they sometimes set a date that you are actually required to have something finished by?

Mr. BEECHER. Yes.

Mr. LAMB. They sometimes do do that.

Mr. BEECHER. Based on time, yeah. For example, when we deployed the views module within VA, which is a case management solution, we had to get that deployed by I think February of 2018. Yeah, 2018.

Mr. LAMB. Okay. So based on what you expect to be finished in October of this year, how quickly would an actual person, say living in Pennsylvania, who qualifies for the expanded benefit, how quickly after October 2019 would they actually see the benefits given to them through your platform?

Mr. BEECHER. So that's a very good question. So by the time we deploy on October 31st, when the applications come in to the caregiver support coordinator, that is when the process kicks in. So I don't know exactly how long it is going to take for that CSC person to enter the application in and do the pieces of tasks that is needed, for example, doing the determination, and visiting the home, and those sorts of responsibilities. So I can't really say.

Mr. LAMB. But as far as the IT product goes, like you finish it on October 31st. The VA is using it live on November 1st?

Mr. BEECHER. Correct.

Mr. LAMB. Okay. Madam Chairwoman, those are my questions. I yield back.

Ms. BROWNLEY. Thank you, Mr. Lamb. Dr. Dunn.

Mr. DUNN. Thank you, Chairman Brownley. Mr. Beecher, virtually all corporations that have a large customer or client base use some sort of customer relations management software. Your company specializes in helping people adopt Salesforce. Am I correct? Do I understand that?

Mr. BEECHER. Correct. We are a—we specialize in a variety of different leading cloud solutions. Salesforce is the one that is one of those technologies.

Mr. DUNN. Does your company use Salesforce?

Mr. BEECHER. Yes, it does.

Mr. DUNN. Good. So this—I am familiar with this software. It is actually fairly easy to use. Intuitive kind of use. Easily adopted by the people in corporations I have worked in. So other than the payroll management side of this thing, which I don't think Salesforce does, but is a very, very standardized corporate program and corporate function, what do you do with Salesforce for all of your clients? You develop spreadsheets for us or what?

Mr. BEECHER. Very good question. So at VA, I will just speak to my VA experience. So at VA, they use Salesforce for a variety of different areas, some of those areas being case management, correspondence management—

Mr. DUNN. That is all the typical things Salesforce does, right?

Mr. BEECHER. They do it very well, yes.

Mr. DUNN. So where do you fit into the thing? I mean when I used Salesforce before, I called them, not you. What? Why?

Mr. BEECHER. Well, we configure the Salesforce platform. We're a services company.

Mr. DUNN. So you just tailor it to the corporation, the end user?

Mr. BEECHER. Yes, so we work with the end user to understand the requirements and we then configure it based on those requirements.

Mr. DUNN. Well, you got a hold of a big old tiger by the tail here. I hope you manage to get it done in October. And with that, I yield back, Madam Chair.

Ms. BROWNLEY. Thank you, Dr. Dunn. Mr. Banks.

Mr. BANKS. Thank you, Madam Chair. Dr. Ocasio, before I get too deep into this, I want to ask you the most important, basic question. Do you believe that CareT is capable of meeting VA's needs now? And if not, what would need to happen to make it capable?

Dr. OCASIO. I think CareT is able to meet the requirements that we were given for this contract. It is not my place to say whether those requirements, as done, are all that the VA needs. I think that once you approach an agile development with the new techniques like having a minimum viable product, and having a dedicated product manager, you sometimes see that you have to adjust your initial plans to what you really need.

So from the perspective of are we basing the decision on how the requirements were written? I think absolutely it can be done. We have all of those pieces. We have the—excuse me, the CareT program has the portal, and has the payment calculations, and have the ability to do the support line and so on and so forth. So to the extent that that is sufficient, then yes, it will be able to accomplish that.

Mr. BANKS. Okay. Your product, CareT, went through a user acceptance testing until February and your company's position is that you fixed all the defects that were uncovered, does that mean all possible defects were fixed or does it mean if testing continued, there may be more defects uncovered and we aren't sure what would happen with those?

Dr. OCASIO. I think that the whole purpose of having a thorough test is to uncover issues. So to the extent that there will be more testing, and in every program that is how you are going to do it, you continue to find, and then you fix them in a timely fashion. So there is no way to say that all of a sudden because an abrupt test ended that there is nothing else to be found.

Mr. BANKS. Okay, Mr. Beecher, Salesforce is a cloud based, customer relationship management or CRM platform. How is that different from CAT and CareT, and how does a CRM system lend itself to administering the caregiver program?

Mr. BEECHER. Excellent question. Excuse me. So what Salesforce is, Salesforce is a platform and so that platform allows us to build solutions to meet those customers' needs. When we met with the VA stakeholders in March, we got a very good understanding of their business processes. We saw their CAT demo. We talked about the strengths of the current systems, the limitations, the deficiencies and what they would like to see. And we were able to develop those requirements using the Salesforce platform to meet those requirements.

Mr. BANKS. So even though you are building the CARMA system on a proven platform, there is obviously a lot of work involved, given the timelines that VA presented. How much of the functionality of the CARMA system already exists in the generic Salesforce platform and how much are you creating?

Mr. BEECHER. That is a good question. I would say that Salesforce is a blank slate, if you will, of a commercial solution that you are able to build. We use the out of the box features to build those functionality. But having said that, based on our experience at VA, we are able to leverage some of those modules that we have previously built for other VA offices into the CARMA module.

So for example, the MVI integration is something that we can leverage and build on. And there are other modules as well that we are leveraging.

Mr. BANKS. So these caregiver systems are databases of fewer than 50,000 people, as I understand. VA has much larger databases than that, but that notwithstanding, these projects are obviously difficult as VA is beginning its fourth attempt. Where do you see the difficulty and the risk, and how is your company going to perform better than that?

Mr. BEECHER. Great question. And I am appreciative of Ms. Harris' testimony before and seeing those nine components, which I absolutely agree with. I mean, those are the predominant risks of client engagement, participation, user acceptance testing.

So to answer your question, according to our—using our methodology, we do a 2-week sprint. At the end of those two weeks, we give the user that ability to go into a test environment and play with the functionality. And so one of the big things that we have heard today is about UAT and waiting too long. Well, we are actually doing it the week right after the sprint, and they will have the ability to go into the system afterwards.

Mr. BANKS. Okay. Thank you. My time is expired.

Ms. BROWNLEY. Thank you, Mr. Banks. And I will yield 5 minutes to myself.

Dr. Ocasio, first, let me say thank you for your service to our country. I had a question for you. Your mission was to develop an online application portal and I understand you accomplished that. It is my understanding. So if you could talk a little bit about the results of the portal. I think the key question I wanted to ask is after the work that you had done, do you think that your portal could have successfully received applications for the caregiver program?

Dr. OCASIO. Yes, it could have.

Ms. BROWNLEY. Yes?

Dr. OCASIO. Yes.

Ms. BROWNLEY. Thank you very much. Mr. Beecher, you are our white knight in shining armor. We are hoping really good things to happen because this program needs to be completed and it needs to get online. We are disappointed that Salesforce couldn't be here so that we could get a sense from them. It is always when people say they can't come, it gives you a bad feeling that maybe they don't have good news to tell, and so they are avoiding being here. I don't know what the situation is.

But you have expressed a lot of confidence that you are on the right track. Obviously, that is a first phase of a longer phased process within CARMA. And I have been saying up here to staff, I hope all of this is good CARMA, not bad CARMA. But in terms of the additional steps that need to take place throughout this, do you have any sense of timeline. The VA obviously can't—won't commit to a timeline. Do you have any sense of it at all?

Mr. BEECHER. No. Our goal is to stay focused on the task at hand with our first two phases.

Ms. BROWNLEY. Pardon me?

Mr. BEECHER. Our goal is to stay focused on those two phases that we are signed up for as far as the task order.

Ms. BROWNLEY. I see. So you have only been contracted for two phases. I understand. Okay. Well, thank you very much. I wonder if either one of you are aware of the Canadian system. Canada has

a comparable caregiver program system that works very effectively is my understanding. And they have a robust user facing portal that allows for the ability to apply online, track status, appeal decisions, and communicate directly with veteran case workers. Are either one of you familiar with that system?

Dr. OCASIO. I am not familiar with it.

Ms. BROWNLEY. No?

Mr. BEECHER. Neither am I.

Ms. BROWNLEY. Okay. Well, with that. I—members have needed to leave. I need to go. So I want to thank both the panels for being here. We will be staying in touch with you to understand the progress because we are all very, very focused on this October deadline. I thank you both for appearing before us today. I think that we have gotten a lot of good information. Now, we just need action and need this program up and running.

And with that, all members will have 5 legislative days to revise and extend their remarks and include extraneous materials. And so without objection, the Subcommittee stands adjourned. Thank you.

[Whereupon, at 11:59 a.m., the Subcommittees were adjourned.]

A P P E N D I X

Prepared Statement of Steven Lieberman, M.D.

Introduction

Good morning Chairwoman Brownley, Chairwoman Lee, Ranking Member Dunn, Ranking Member Banks, and Members of the Subcommittees. Thank you for the opportunity to discuss VA's Caregivers Program relative to the John S. McCain III, Daniel K. Akaka, and Samuel R. Johnson VA Maintaining Internal Systems and Strengthening Integrated Outside Networks Act of 2018 (commonly referred to as the MISSION Act), and its supporting Information Technology (IT) systems. I am accompanied today by Dr. Elyse Kaplan, Deputy Director, VA Caregiver Support Program, and Dr. Alan Constantian, Deputy Chief Information Officer, Account Management Office and Account Manager for Health.

Caregivers play a critical role in the United States health care system. VA is leading the country in providing unprecedented benefits and services to caregivers in support of Veterans, knowing that providing care takes a toll on one's physical, psychological, and financial health. Caregivers enable Veterans to maintain their highest level of independence and remain in their homes and communities for as long as possible. The MISSION Act expands comprehensive services and supports to family caregivers of eligible Veterans of all service eras.

MISSION Act and PCAFC Transformation

The Program of Comprehensive Assistance for Family Caregivers (PCAFC) is currently limited to eligible Veterans who incurred or aggravated a serious injury in the line of duty on or after September 11, 2001, and their family caregivers, who have benefited greatly from the services provided through this program. Under the MISSION Act, PCAFC will expand to include eligible Veterans of earlier service eras once VA certifies to Congress that we have fully implemented the required IT system. The expansion will occur in two phases beginning with eligible Veterans who incurred or aggravated a serious injury in the line of duty on or before May 7, 1975. Two years later, PCAFC will expand to include eligible Veterans injured during the remaining eras of service. VA is pleased to expand PCAFC to more family caregivers of eligible Veterans of all service eras.

VA was working to improve the administration of PCAFC in response to concerns about inconsistency before the MISSION Act was enacted and now we have increased those efforts to support the program's expansion. The Caregiver Support Program (CSP) has strengthened its overall governance by requiring every Veterans Integrated Service Network (VISN) Director to designate a VISN Lead who is charged with monitoring the administration of PCAFC across the VISN; providing guidance, coaching, and support to Caregiver Support Coordinators (CSC) within the VISN; and ensuring compliance with national policy and procedures. In cases where a VISN Lead is also a Caregiver Support Coordinator, VISN Directors are required to ensure another identified point of contact at the VISN Office.

VA recognizes that the current eligibility criteria and assessment for PCAFC are complex and is, therefore, engaged in process improvement efforts to promote accurate and consistent decision making. The Caregiver Support Program deployed a mandatory annual refresher training for CSCs and VISN Leads in March 2019 and followed this with small group discussions to provide further opportunity for clarification and coaching. Additionally, clinical eligibility training for PCAFC providers is currently in development and will serve to further enhance accurate decision-making.

VA has amended Veterans Health Administration (VHA) Directive 1152(1), Caregiver Support Program, to include 14 Standard Operating Procedures (SOP) that provide further guidance to field based staff responsible for administering local CSPs. SOP topics include required orientation, required training, and other operationalizing procedures governing PCAFC such as communicating roles, respon-

sibilities, and requirements to those applying for PCAFC. National training on these SOPs was provided to CSCs and VISN leads in October 2018.

VA has heard concerns from Veterans, caregivers, and other stakeholders about PCAFC inconsistencies. We have done a great deal of work to better train and equip our staff with the tools needed to promote increased standardization; however, more needs to be done. VA understands the importance of changing elements of the program that will foster consistency, improve transparency, and provide support and services to eligible Veterans and their caregivers, as intended. To achieve this, VA is pursuing regulatory changes to improve the current PCAFC and expand PCAFC eligibility and services as required by the MISSION Act. Changes under consideration include modifying the stipend payment methodology; establishing a standardized timeframe for eligibility reassessments; and redefining aspects of the eligibility requirements, such as the definition of serious injury, to provide more clarity for VA staff and more importantly, Veterans and their family caregivers. As part of PCAFC expansion, VA also considered reducing the number of need tier levels. Currently there are three tiers, which generally correspond to low, moderate, and high degrees of need. Any changes to PCAFC regulations are subject to notice and comment rule-making.

As we pursue the rulemaking required to implement the MISSION Act, VA has pursued opportunities to engage Veterans, subject matter experts, Veterans Service Organizations (VSO), caregivers, and other stakeholders. In November 2018, a notice was published in the Federal Register seeking public comments on how to improve PCAFC and implement certain changes to PCAFC that are required by the MISSION Act. Feedback included the importance of clear definitions, for example personal care services, the impact of cognitive impairment and standardization of eligibility. Additionally, in March and April 2019, VA held meetings with various VSOs to discuss PCAFC and the MISSION Act. Discussion topics included the definitions related to PCAFC eligibility, the tier system, and the revocation and transition of participants from PCAFC. A listening session with a small group of caregivers currently participating in the PCAFC occurred on April 26, 2019. This listening session sought input on the delivery of legal services and financial planning services, as authorized by the MISSION Act.

Any proposed changes to the regulations governing PCAFC, including rulemaking to implement expanded eligibility and services as directed by the MISSION Act, will include an impact analysis that provides, among other things, projected costs and impact on eligible Veterans and caregivers. Regardless of pending regulatory changes impacting eligibility determinations, consistent decision making and transparent communication, that includes input from the Veteran and family caregiver, will remain an integral part of our processes.

IT Development Process

VA acknowledges that we have faced technology challenges around the Caregiver Support Program in the past. In response to these challenges, the VA Office of Information Technology and VHA agreed to execute a strategic pivot away from a custom developed to a commercial off-the-shelf (COTS) system to better support the program's current and future needs and business requirements.

This pivot included simplifying the business requirements coupled with selecting the right COTS software platform which could be configured to meet the specific requirements of VA's Caregiver program. Additionally, VA shifted from an approach where all desired system requirements were delivered in a single release to one where useful functional components could be delivered into production for use by the program office incrementally. This is the agile development approach to software development widely adopted across the private and public sectors. We also designated a full-time Product Manager to ensure that we build a highly functioning product in an iterative manner; have the proper oversight over implementation; and ensure future expansion of the program. Currently, VA is actively engaging in planning for data migration and integration with other VA systems, such as the Master Veteran Index, the Enrollment System, the Financial Management System, and the Benefit Gateway System.

The original effort to develop an IT solution for the current program was intended to support administrative processing of applications, automate stipend payments to Caregivers, and provide systems support for Caregiver Support Services and the Caregiver Support Line. However, because of defects arising during user acceptance testing of the CareT product, testing was paused in early January 2019. VA reviewed its options for implementing a robust Caregiver IT solution in January and February 2019 and chose to take a new direction it believes will provide a firmer foundation for systems support for the Caregiver program in the long run. We chose the commercially available Salesforce solution as an improved technological plat-

form for our systems solution. We also committed to a more intentionally agile development approach, with incremental deliveries of capability into production. Finally, we assigned and empowered a Product Manager for the new approach who will guide the agile development process of the newly named Caregiver Record Management Application (CARMA). The Product Manager is responsible for the backlog of IT work and will ensure the program's prioritized requirements are executed in a disciplined agile manner through incremental releases. The projected outcome is the delivery of software and a database on a scalable computing platform to meet the requirements of the MISSION Act.

CARMA will replace the existing Caregiver Application Tracker (CAT) and will have multi-level functionality, including the ability to:

- Track and manage PCAFC applications, including approvals, denials, and appeals;
- Support the administration of PCAFC and monitoring the well-being of participants in PCAFC;
- Track calls made to the Caregiver Support Line (CSL), as well as caregiver referrals to local medical centers for additional assistance;
- Process stipend payments to family caregivers in PCAFC; and
- Improve reporting capabilities.

The MISSION Act requires that this new system easily retrieve data that allows all aspects of PCAFC, including workload trends (at the medical center and aggregate levels), be assessed and comprehensively monitored. Further, the system must have the ability to manage caregiver data that exceeds the number of caregivers that the Secretary of Veterans Affairs expects to apply for PCAFC, as well as the ability to integrate the system with other relevant VHA IT systems.

Delivery Schedule

The first release of CARMA is expected to be launched in quarter 1 of Fiscal Year 2020. It will replace much of the CAT functionality as it currently exists and feature increased data integrity, to allow for improved oversight at the medical center level. The second release of CARMA, anticipated in January 2020 (exact date to be determined) will automate the processing of stipend payments to caregivers. Subsequent releases of CARMA and associated efforts will modify systems with which CARMA will interface (e.g. the Computerized Patient Record System; the Enrollment and Eligibility System; and Veterans Information Systems and Technology Architecture VistA components) and deliver other program office requirements needed to fully support PCAFC expansion.

Conclusion

VA supports the expansion of PCAFC and recognizes the sacrifice and value of Veterans' family caregivers. Expanding PCAFC eligibility under the MISSION Act will allow VA to support family caregivers of Veterans of all eras of service. Given the critical role caregivers play in providing for Veterans, VA is committed to the development of robust policies and systems that support them. We are committed to rebuilding the trust of Veterans and will work hard to continue the improvements we have made thus far. Your continued support is essential to providing this care for Veterans and their families. This concludes my testimony. My colleagues and I are prepared to answer any questions.

Carol C. Harris

VA HEALTH IT

Use of Acquisition Best Practices Can Improve Efforts to Implement a System to Support the Family Caregiver Program

Chairs Lee and Brownley, Ranking Members Banks and Dunn, and Members of the Subcommittees:

Thank you for the opportunity to participate in today's hearing regarding the Department of Veterans Affairs' (VA) efforts to implement an information technology (IT) system to support the management and execution of its Program of Comprehensive Assistance for Family Caregivers (Family Caregiver Program).

To provide greater support for caregivers of post-9/11 veterans, Congress and the President enacted legislation in May 2010 requiring VA to establish a program to

assist caregivers with the rigors of caring for seriously injured veterans.¹ In May 2011, the Veterans Health Administration (VHA), which operates VA's health care system, established the Family Caregiver Program at each of its VA medical centers (VAMC) across the United States.

At that time, the department implemented an IT system, called the Caregiver Application Tracker (CAT), to help support the program. However, we reported in September 2014 that CAT, which is still in use today, had limitations and recommended that VA expedite the implementation of a replacement system.²

As you requested, my statement today summarizes findings from our September 2014 report that discussed VA's implementation of the Family Caregiver Program. This statement also includes relevant information that VA provided on its actions toward addressing our prior recommendation. Further, my statement discusses critical success factors related to major IT acquisitions identified in our prior work.³ We have previously reported that these success factors could enhance the likelihood that an IT acquisition will be successful. The reports cited throughout this statement include detailed information on the scope and methodology of our prior reviews.

We conducted the work on which this statement is based in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

VHA's Family Caregiver Program is designed to provide support and services to family caregivers of post-9/11 veterans who have a serious injury that was incurred or aggravated in the line of duty. The program provides approved primary family caregivers with a monthly financial stipend as well as training and other support services, such as counseling and respite care.⁴

The Family Caregiver Program has a series of eligibility requirements that must be satisfied in order for family caregivers to be approved.

- To meet the program's initial eligibility criteria, the veteran seeking caregiver assistance must have a serious injury that was incurred or aggravated in the line of duty on or after September 11, 2001.⁵ According to the program's regulations, a serious injury is any injury, including traumatic brain injury (TBI), psychological trauma, or other mental disorder, that has been incurred or aggravated in the line of duty and renders the veteran or servicemember in need of personal care services.
- The veteran must be in need of personal care services for a minimum of 6 continuous months based on any one of the following clinical eligibility criteria: (1) an inability to perform one or more activities of daily living, such as bathing, dressing, or eating;⁶ (2) a need for supervision or protection based on symptoms or residuals of neurological or other impairment or injury such as TBI, post-traumatic stress disorder, or other mental health disorders; (3) the existence of a psychological trauma or a mental disorder that has been scored by a licensed mental health professional, with a Global Assessment of Functioning score of 30 or less,⁷ continuously during the 90-day period immediately preceding the

¹ See Caregivers and Veterans Omnibus Health Services Act of 2010, Pub. L. No. 111-163, 124 Stat. 1130 (May 5, 2010) (codified at 38 U.S.C. § 1720G). The term "caregiver" in this testimony refers to the individual that VA approved to serve as the veteran's primary caregiver. A veteran may have up to three approved caregivers at a time under the program, see 38 C.F.R. § 71.25(a)(1), but only the primary caregiver is eligible for the full range of services authorized by the statute. 38 U.S.C. §§ 1720G(a)(3)(A), (a)(7)(B).

² GAO, VA Health Care: Actions Needed to Address Higher-Than-Expected Demand for the Family Caregiver Program, GAO-14-675 (Washington D.C.: Sept. 18, 2014).

³ GAO, Information Technology: Critical Factors Underlying Successful Major Acquisitions, GAO-12-7 (Washington, D.C.: Oct. 21, 2011).

⁴ Other approved caregivers—referred to as secondary family caregivers—may be eligible for training, counseling, and certain lodging and subsistence.

⁵ The applicant could also be a servicemember who is undergoing medical discharge from the military.

⁶ The activities of daily living that veterans may need assistance with to qualify for the program include dressing or undressing; bathing; grooming; toileting; eating; mobility such as from the bed to a chair; and frequently adjusting a prosthetic or orthopedic device that cannot be done without assistance.

⁷ The Global Assessment of Functioning assessment is a well-established mental health examination that uses a score of zero to 100 to determine an individual's ability to function psycho-

date on which VHA initially received the application; or (4) the veteran has been rated 100 percent service connected disabled for a qualifying serious injury and has been awarded special monthly compensation that includes an aid and attendance allowance.⁸

- To be considered competent to care for the veteran, family caregivers must meet certain requirements including (1) having the ability to communicate and follow details of the treatment plan and instructions related to the care of the veteran; (2) not determined by VA to have abused or neglected the veteran; (3) being at least 18 years of age; and (4) either being a family member—such as a spouse, son or daughter, parent, step-family member, or extended family member—or an unrelated person who lives or will live full-time with the veteran.
- Family caregivers must also complete required training before being approved for the program.

Family Caregiver Program Organizational Structure

VHA's Caregiver Support Program office is responsible for developing policy and providing guidance and oversight for the Family Caregiver Program. It also directly administers the program's stipend, provides support services such as a telephone hotline and website, and arranges coverage through the Civilian Health and Medical Program of the Department of Veterans Affairs (CHAMPVA) for eligible caregivers if they have no other coverage.⁹

Further, the office provides funding to VAMCs to cover certain program costs. These costs may include the salaries of the caregiver support coordinators (CSC), who implement and administer the Family Caregiver Program at the local VAMC level, and the costs VAMCs incur for having their clinical staff, such as nurses, conduct the program's required in-home visits to approved caregivers and their veterans.

CSCs are generally licensed social workers or registered nurses, and they have both clinical and administrative responsibilities. Their clinical responsibilities may include identifying and coordinating appropriate interventions for caregivers or referrals to other VA or non-VA programs, such as mental health treatment, respite care, or additional training and education. Their administrative responsibilities may include responding to inquiries about the program, overseeing the application process, entering information about applications and approved caregivers into IT systems, and facilitating the processing of appeals.

As of May 2014, there were 233 CSCs assigned to 140 VAMCs or health care systems across the country.¹⁰ Additionally, each regional VISN office has a VISN CSC lead for the program, who provides guidance to CSCs and helps address their questions or concerns.

GAO Has Previously Reported on the Family Caregiver Program IT System Limitations

CAT, which was deployed in May 2011, is a web-based system that was designed to facilitate the exchange of information about approved caregivers between VAMCs and other VHA entities. Such entities include the Health Administration Center, which processes the caregiver stipend payments and administers CHAMPVA.

In 2014, we reported that the Caregiver Support Program office was not able to easily retrieve data from CAT that would allow officials to better assess workload trends at individual VAMCs—such as the length of time applications are delayed or the timeliness of home visits—even though these data were already captured in the

logically and socially. An individual who has been assessed as having a psychological trauma or mental disorder and has been scored at 30 or less generally requires a higher level of care that would include constant supervision.

⁸VA's Aid & Attendance is a financial benefit for veterans who require assistance from a caregiver. It can be added to a veteran's existing pension if the veteran requires assistance with activities of daily living or for safety. Veterans who are bedridden, severely visually impaired, or reside in a nursing home due to mental or physical incapacity also may qualify.

⁹Primary family caregivers approved for the Family Caregiver Program qualify for CHAMPVA if they are not eligible for TRICARE and are not entitled to care or services under a health plan contract (as defined in 38 U.S.C. § 1725(f)), including Medicare or employer provided health insurance. Caregivers covered by CHAMPVA can receive medical services from community providers or, when available, from VAMCs.

¹⁰While CSCs administer the Family Caregiver Program at 151 VA facilities, they are assigned to 140 VAMCs or health care systems, which may include more than one VA facility. We present program statistics based on CSC assignments because that is how they are tracked by the Caregiver Support Program office.

system.¹¹ Caregiver Support Program officials only retrieved workload data on an ad hoc, as-needed basis, which limited their ability to assess the scope and extent of workload problems comprehensively at individual VAMCs and on a system-wide basis. Program officials also expressed concern about the reliability of the system's data.

As we noted in our report, program officials also identified the need for a more capable and flexible system that could interface with other departmental systems. The officials told us that they had taken initial steps to obtain another IT system to support the Family Caregiver Program; however, the officials were not sure how long it would take to implement the system. Accordingly, we recommended that VA expedite the process for identifying and implementing a system that would fully support the Family Caregiver Program.

VA concurred with our recommendation and subsequently began taking actions in 2015 to implement a replacement system. These actions included taking steps toward implementing short-term improvements to CAT that were to be followed by the implementation of a long-term replacement system. The recommendation continues to remain open.

Statute Directs VA to Implement an IT System to Support the Family Caregiver Program

The John S. McCain III, Daniel K. Akaka, and Samuel R. Johnson VA Maintaining Internal Systems and Strengthening Integrated Outside Networks Act of 2018 (VA MISSION Act), which was enacted in June 2018, included provisions directing VA to implement an IT system to support the Family Caregiver Program and the incremental expansion of program eligibility.¹² Specifically, the Act required VA to implement an IT system to fully support the Family Caregiver Program by October 1, 2018. According to the act, the system is to allow for data assessment and comprehensive monitoring of the program. In particular, the system is to have, among other things, the ability to (1) retrieve data to monitor workload trends at the medical center and aggregate levels; (2) manage an increased number of caregivers as the program expands; and (3) integrate with other relevant IT systems at VHA.

The act also stated that VA was to submit an initial report to Congress regarding the status of the planning, development, and deployment of this system within 90 days of enactment of the VA MISSION Act, and that the department is to submit a final report to Congress by October 1, 2019. The final report is to include a certification by the VA Secretary that the system has been implemented, along with a description of how the Secretary is using the system to monitor the workload of the program.

VA Has Not Yet Implemented an IT System That Effectively Supports the Family Caregiver Program

Although we previously recommended that VA expedite implementation of a replacement for CAT, and the MISSION Act directed the department to implement an IT system to support the Family Caregiver Program, VA has not yet been successful in its multiple efforts to implement such a system. Specifically, VA has faced a number of difficulties in developing and implementing short-term improvements as well as a long-term replacement system for CAT.

In July 2015, VHA and the Office of Information and Technology (OIT) initiated a joint acquisition project, called CAT Rescue, to update CAT and improve the system's data reliability.¹³ However, the department reported in January 2017 that this project had experienced delays and identified a large number of defects during system testing. VA terminated the project in April 2018 before any new system capabilities were implemented.

A companion project to CAT Rescue that VA initiated in September 2015 was to develop the Caregivers Tool (CareT), a new system intended to be a long-term replacement for CAT. As envisioned, this system was to use the improved data from CAT Rescue while also adding new system capabilities. However, the user accept-

¹¹ GAO-14-675.

¹² Pub. L. No. 115-182, §§ 161-163, 132 Stat. 1438-1443 (2018). The VA MISSION Act requires an incremental expansion of eligibility for the Family Caregiver Program. Specifically, within 2 years of the VA Secretary certifying the IT system for the Family Caregiver Program, VHA is to expand program eligibility to caregivers of veterans with a serious injury incurred or aggravated in the line of duty on or before May 7, 1975 or on or after September 11, 2001. Two years after this initial expansion of eligibility, VHA is to further expand program eligibility to include veterans with a serious injury incurred or aggravated in the line of duty and is in need of personal care services as specified in the statute.

¹³ OIT, under the leadership of the Assistant Secretary for Information and Technology/Chief Information Officer, manages most IT-related functions at VA.

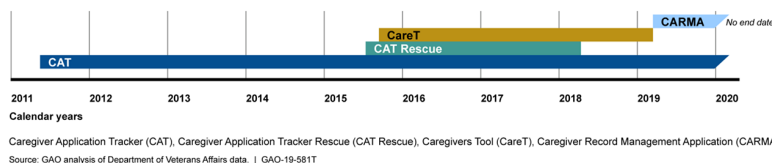
ance testing of CareT identified the need for the department to develop more system capabilities than originally planned. Further, the department determined that the time period needed to perform additional system development would have extended beyond the term of the development contract, which ended in April 2017.

VA subsequently awarded a new CareT development contract in July 2017. However, after additional system development, the department determined during user acceptance testing that the system was not performing as expected and implementation of CareT was further delayed. In October 2018, the department reported to congressional committees that implementing a system to fully support the Family Caregiver Program by the VA MISSION Act deadline was not feasible. Subsequently, the department determined that CareT was not a viable solution and VHA and OIT terminated work on the system in February 2019.

VHA and OIT began a third effort in March 2019 to acquire a replacement system that is to be based on an existing commercial product. According to OIT officials, the new IT solution, referred to as the Caregiver Record Management Application (CARMA), is intended to replace CAT. However, the department has not yet established a date for completing CARMA.

Thus, VA's efforts to implement an IT system that supports the Family Caregiver Program have been continuing with no end in sight. We have ongoing work to further evaluate the status and progress of the department's efforts to implement a system to support the Family Caregiver Program consistent with the VA MISSION Act requirements. Figure 1 provides a timeline of the various IT projects that VA has undertaken to support the program.

Figure 1: Timeline of the Veterans Affairs' Family Caregiver Program's IT System Update and Replacement Projects



Critical Factors Underlying Successful IT Acquisitions

Our prior work has determined that successfully overcoming IT acquisition challenges can best be achieved when critical success factors are applied.¹⁴ Specifically, we reported in 2011 on common factors critical to the success of IT acquisitions, based on seven agencies having each identified the acquisition that best achieved the agency's respective cost, schedule, scope, and performance goals. These factors remain relevant today and can serve as a model of best practices that agencies can apply to enhance the likelihood that the acquisition of an IT system such as CARMA will be successfully achieved.

Among the agencies' seven IT investments, agency officials identified nine factors as having been critical to the success of three or more of the seven investments. These nine critical success factors are consistent with leading industry practices for IT acquisition. The factors are:

- Active engagement of program officials with stakeholders.
- Qualified and experienced program staff.
- Support of senior department and agency executives.
- Involvement of end users and stakeholders in the development of requirements.
- Participation of end users in testing system functionality prior to formal end user acceptance testing.
- Consistency and stability of government and contractor staff.
- Prioritization of requirements by program staff.
- Regular communication maintained between program officials and the prime contractor.
- Sufficient funding.

Officials for all seven selected investments cited active engagement with program stakeholders—individuals or groups (including, in some cases, end users) with an interest in the success of the acquisition—as a critical factor to the success of those in-

¹⁴GAO-12-7.

vestments. Agency officials stated that stakeholders, among other things, reviewed contractor proposals during the procurement process, regularly attended program management office sponsored meetings, were working members of integrated project teams,¹⁵ and were notified of problems and concerns as soon as possible. Further, officials from two investments noted that actively engaging with stakeholders created transparency and trust, and increased the support from the stakeholders.

Additionally, officials for six of the seven selected investments indicated that the knowledge and skills of the program staff were critical to the success of the program. This included knowledge of acquisitions and procurement processes, monitoring of contracts, large-scale organizational transformation, Agile software development concepts,¹⁶ and areas of program management such as earned value management and technical monitoring.

Finally, officials for five of the seven selected investments identified having the end users test and validate the system components prior to formal end user acceptance testing for deployment as critical to the success of their program. Similar to this factor, leading guidance recommends testing selected products and product components throughout the program life cycle.¹⁷ Testing of functionality by end users prior to acceptance demonstrates, earlier rather than later in the program life cycle, that the functionality will fulfill its intended use. If problems are found during this testing, programs are typically positioned to make changes that would be less costly and disruptive than ones made later in the life cycle.

In conclusion, VA has invested considerable time in multiple efforts toward improving and replacing its IT system to better serve the Family Caregiver Program. However, even with these efforts, the department has not yet implemented a system and the program is not prepared for expansion. Going forward, it is important that VA take steps to improve its efforts to implement a replacement IT system for the Family Caregiver Program. In this regard, the department could benefit from applying critical success factors we previously reported as leading to successful federal IT acquisitions. These factors can serve as a model of best practices that the department can apply to enhance the likelihood that its effort to replace the IT system for the Family Caregiver Program will be successful.

Chairs Lee and Brownley, Ranking Members Banks and Dunn, and Members of the Subcommittees, this completes my prepared statement. I would be pleased to respond to any questions that you may have.

GAO Contact and Staff Acknowledgments

If you or your staffs have any questions about this testimony, please contact Carol C. Harris, Director, Information Technology Management Issues, at (202) 512-4456 or harriscc@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this testimony statement. GAO staff who made key contributions to this testimony are Mark Bird (Assistant Director), Rebecca Eyler, Jacqueline Mai, Monica Perez-Nelson, Scott Pettis, and Jennifer Stavros-Turner (Analyst in Charge).

GAO HIGHLIGHTS

Why GAO Did This Study

To provide greater support for caregivers of post-9/11 veterans, Congress and the President enacted legislation requiring VA to establish a program to assist caregivers with the rigors of caring for seriously injured veterans. In May 2011, the Veterans Health Administration (VHA), which operates VA's health care system, established the Family Caregiver Program at each of its VA medical centers across the United States. At that time, the department implemented an IT system, called CAT, to help support the program. Subsequently, the VA MISSION Act was enacted in June 2018, requiring VA to implement an IT system to fully support the Family

¹⁵The Office of Management and Budget defines an integrated project team as a multi-disciplinary team led by a project manager responsible and accountable for planning, budgeting, procurement, and life-cycle management of the investment to achieve its cost, schedule, and performance goals. Team skills include budgetary, financial, capital planning, procurement, user, program, architecture, earned value management, security, and other staff as appropriate.

¹⁶Agile software development is not a set of tools or a single methodology, but a philosophy based on selected values, such as prioritizing customer satisfaction through early and continuous delivery of valuable software; delivering working software frequently, from every couple of weeks to every couple of months; and making working software the primary measure of progress.

¹⁷See, for example, Carnegie Mellon Software Engineering Institute, Capability Maturity Model Integration for Acquisition (CMMI-ACQ), Version 1.3 (November 2010).

Caregiver Program by October 1, 2018. Further, VA's Secretary is to certify the system by October 1, 2019.

GAO was asked to discuss its September 2014 report that examined how VHA is implementing the Family Caregiver Program. In addition, the statement includes relevant information VA provided on its actions toward addressing GAO's prior recommendation. The statement also discusses critical success factors related to IT acquisitions as identified in GAO's prior work. The reports cited throughout this statement include detailed information on the scope and methodology of GAO's prior reviews.

What GAO Recommends

GAO recommended in 2014 that VA expedite the process for identifying and implementing an IT system that would fully support the Family Caregiver Program. VA concurred with the recommendation and subsequently began taking steps to implement a replacement system. The recommendation remains open.

What GAO Found

In September 2014, GAO reported on the Department of Veterans Affairs' (VA) Program of Comprehensive Assistance for Family Caregivers (Family Caregiver Program) and found that the program office had limitations with its information technology (IT) system—the Caregiver Application Tracker (CAT). Specifically, the program did not have ready access to workload data that would allow it to monitor the effects of the program on VA medical centers' resources. VA has initiated various projects since 2015 to implement a new system, but has not yet been successful in its efforts. (See figure.) Specifically, in July 2015 VA initiated a project to improve the reliability of CAT's data, called CAT Rescue. However, the department reported in January 2017 that it had identified numerous defects during system testing. The project ended in April 2018 before any new system capabilities were implemented. A companion project was initiated in September 2015 to develop the Caregivers Tool (CareT), a new system intended to replace CAT. The CareT project was expected to use improved data from CAT Rescue, while also adding new system capabilities. However, the user acceptance testing of CareT identified the need for the department to develop more system capabilities than originally planned. Further, VA reported that implementing a system by October 1, 2018, as specified in the Maintaining Internal Systems and Strengthening Integrated Outside Networks Act of 2018 (MISSION Act), was not feasible. Subsequently, VA terminated CareT in February 2019. The department initiated another project in March 2019 to implement a new system, the Caregiver Record Management Application (CARMA). GAO has ongoing work to evaluate the department's efforts to implement an IT system to support the Family Caregiver Program as required by the MISSION Act.

FIGURE ONE HERE ALSO

GAO's prior work has determined that successfully overcoming IT acquisition challenges can best be achieved when critical success factors are applied. These factors can serve as a model of best practices that VA could apply to enhance the likelihood that the acquisition of a replacement IT system for the Family Caregiver Program will be successfully achieved. Examples of these critical success factors include, maintaining active engagement of program officials with stakeholders, involving end users and stakeholders in the development of requirements, and ensuring participation of end users in testing system functionality prior to formal end user acceptance testing.

Wendell Ocasio, MD

Chairwoman Brownley, Chair Lee, Ranking Member Dunn, Ranking Member Banks, and distinguished Members of the Subcommittees, thank you for this opportunity to testify today regarding VA's Caregiver Tool development. AbleVets LLC is a certified Service-Disabled Veteran Owned Small Business specializing in cybersecurity, agile engineering, analytics and technology enablement solutions for government.

AbleVets was awarded the "Caregiver Tool Development" (CareT) contract (VA11816F10090010) on July 5, 2017. The delivery requirement for the 10-month Base Period was for AbleVets to, starting with an existing CareT application code base, implement a defined set of additional application requirements, migrate data from Caregiver Application Tracker (CAT) Rescue into the CareT product, test the final product, and deploy into production. The two 12-month Option Periods were focused solely on sustaining the CareT application once deployed into production.

Ultimately, AbleVets was obligated \$3.5M over a 23-month period, successfully completing and delivering the Base Period requirements. The government accepted all deliverables and issued a Satisfactory performance rating. We are currently performing the Optional Task "Transition Out" requirements prior to the contract close-out on May 28, 2019. A more detailed summary of the work AbleVets performed is below:

Upon award of the contract in July 2017, AbleVets was provided the existing CareT source code and supporting files that were developed under a previous contractor. We made modifications to this code to implement the additional requirements documented in the VA-approved requirements backlog.

In August 2017, AbleVets began efforts to migrate data from VA's transitional Caregiver management tool called, CAT Rescue, into CareT. The CAT Rescue effort was performed by a separate contract/contractor. The CAT Rescue contract experienced delays and eventually in April 2018, VA decided not to deploy CAT Rescue. Based on the new plan to transition VA's production caregiver tool called CAT directly to CareT, our data migration requirement shifted to migrate data from CAT instead. Because of this change, VA exercised a 4-month cost-modification to the AbleVets CareT contract, resulting in the target date for completion of CareT being extended to September 4, 2018.

In August 2018, the VA program manager issued a new requirement consisting of changes to a specific piece of functionality that had been completed under the previous CareT contract. This piece of functionality provided a 'portal' interface to allow veterans and caregivers to complete the application online, which would then be transferred directly to the VA staff for adjudication. As VA directed the implementation of this new requirement in late August, they awarded AbleVets a 3-month cost-modification to AbleVets' CareT contract, providing time for us to complete this new requirement. The result of this contract modification was to extend the target date for completion of CareT to December 4, 2018.

In late November 2018, upon completion of the new portal requirement, AbleVets had remaining data migration to complete. The migration effort had taken longer than estimated due to the need to come up to speed on the CAT database since the data model was significantly different than the initially planned CAT Rescue. VA and AbleVets agreed to a no-cost extension to allow time for the data migration to complete. At that time, the new target date for completion of CareT was moved to Feb 28, 2018.

End to end user-acceptance testing began on the CareT application November 2018. Throughout this testing, AbleVets worked closely with VA to identify any issues identified by the testers and categorize them as application defects or issues representing additional requirements beyond the approved baseline. AbleVets resolved defects in parallel with continued user-acceptance testing.

In mid-January 2019, AbleVets was informed by VA program management that they decided to pause further testing. During this pause, AbleVets continued to resolve open defects that had been identified to that point. By mid-February 2019, AbleVets had resolved all identified defects and completed the data migration efforts. At that point we were informed by VA that the Department had chosen not to proceed with deployment of CareT, and thus were not going to exercise the sustainment Optional Years. Instead, VA exercised the "Transition Out" Optional Task - a 90-day knowledge transfer and close-out period. We have successfully performed Transition Activities, have had all contract deliverables and invoices approved, and are on-target to end support on May 28, 2019. Thank you.

Ken Beecher

Good morning to all members of the House Veterans Affairs Committee and Subcommittees. Thank you for the opportunity to discuss VA's Caregiver development contract using the Salesforce platform. My name is Ken Beecher and I'm a Director at Acumen Solutions with responsibility for the delivery and execution of our projects at the US Department of Veterans Affairs.

Acumen Solutions is a global consulting firm that helps Fortune 1000 companies and government agencies anticipate and respond to their customers' needs with innovative cloud-based IT solutions. We were founded in 1999, and our primary focus is to build mission-based systems that strengthen customer relationships. As an industry leader, we partner with some of the brightest innovators in cloud technology, such as Salesforce, to create exceptional solutions for our customers. It is our robust experience, innovative strategies, and a commitment to see our customers succeed that make us a trusted and proven leader in cloud consulting.

Acumen Solutions is one of Salesforce's Global Strategic Partners, the highest tier in the Salesforce partner ecosystem. We have completed over 1,800 Salesforce projects across our commercial and public sector practices. We have worked in nearly all the Federal cabinet agencies - including the VA - and are proud of our outstanding customer satisfaction rating. In short: we pride ourselves in bringing value to our customers and those they serve.

In September 2018, we were awarded a Blanket Purchase Agreement called VA Enterprise Case Management Solutions (VECMS). This vehicle provides the VA with easy access to Acumen Solutions' professional services to implement Salesforce's technology platform for any department within the VA. In March 2019, VA tasked Acumen Solutions with developing a Level of Effort for a Minimum Viable Product (MVP) for the Caregiver Record Management Application project (CARMA) under the VECMS contract.

The Caregiver program is an important subset of the MISSION Act, which was passed to improve the VA's ability to deliver health care to our veterans; and CARMA is a subset of the Caregiver program.

In April 2019, VA awarded Acumen Solutions the CARMA Phase 1 Minimum Viable Product (MVP) Task Order in the amount of \$3,841,491.19 to perform implementation and integration services. The scope of the Phase 1 MVP is to replace the existing system, Caregiver Application Tool (CAT), used by the Caregiver Support Program (CSP) with an application built on the Salesforce platform. The new system will have improved functionality to process and manage CSP applications, allow for manual determination of eligibility, provide improved program monitoring and tracking, and capture call records and referrals by the Caregiver Support Line (CSL).

We recognize the VA's pressing need to develop and build its Information Technology (IT) systems at less expense and with the nation's veterans at the center. Acumen Solutions is using the Agile SCRUM software development methodology to build the CARMA solution, which enables us to rapidly build Salesforce solutions using configuration while minimizing custom code. Furthermore, we employ a User Centered Design (UCD) methodology with close consultation with US Digital Services (USDS), meaning that we meet with users of the system to understand their needs and pain points, and then create artifacts such as prototypes and journey maps, which are then shared with the configuration team. Our configuration team then works in a two week sprint, ending with a demonstration of what was built for immediate feedback. To mitigate risk, we provide VA end-users access to a test environment with the latest application code, so they can interact with and test the functionality independently. Each sprint builds on the previous one until we reach a completed solution. Our methodology lowers the risk to the VA and to taxpayers by developing pieces of the overall solution in bite size increments. In addition, we work with the users throughout to constantly confirm that each stage of development meets their acceptance criteria.

Our success to date in configuring Salesforce and replacing legacy systems are a result of collaboration with the VA business office and its associated product owners, USDS, VA Digital Transformation Center (DTC), OI&T, the Technology Acquisition Center (TAC), and the Salesforce Program and Business Architects working at the VA.

Acumen Solutions is proud to partner with the VA and Salesforce to provide an innovative, effective solution to assist the VA on behalf of our nation's veterans and their caregivers.

Thank you. I look forward to your questions.

