ADVANCING VA CARE THROUGH ARTIFICIAL INTELLIGENCE

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BEFORE THE

SUBCOMMITTEE ON TECHNOLOGY MODERNIZATION

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MONDAY, SEPTEMBER 15, 2025

SUBCOMMITTEE ON TECHNOLOGY MODERNIZATION, COMMITTEE ON VETERANS' AFFAIRS, U.S. House of Representatives, Washington, DC.

The subcommittee met, pursuant to notice, at 2:58 p.m., in room 360, Cannon House Office Building, Hon. Tom Barrett (chairman of the subcommittee) presiding.
Present: Representatives Barrett, Luttrell, Budzinski, and

Cherfilus-McCormick.

OPENING STATEMENT OF TOM BARRETT, CHAIRMAN

Mr. Barrett. The subcommittee will come to order.

Without objection, the chair may declare a recess at any time.

Like many who have worn the uniform and received U.S. Department of Veterans Affairs (VA) health care, I know the frustration when the system is slow, the paperwork stacks up or the technology fails, or does not lead us in the direction we are trying to go. That is why this subcommittee's work is so critical and why it is important that we have the folks here joining us today.

It is our duty to ensure VA's technology is efficient and reliable, helping veterans rather than standing in the way of their care. That brings us to the focus of today's hearing, artificial intelligence, or AI, as it is of course commonly referred to right now. For some, AI sounds like a science fiction movie—we have all seen many of them-something only computer scientists worry about or even something scary because it is unknown and not well understood. It feels like today everything is about drones or artificial intelligence. The world has shifted quite a bit.

Within VA, AI is already being used in ways they are making a real difference for our veterans. In fact, U.S. Government Accountability Office (GAO) recently released a report highlighting how VA is among the most active adopters of artificial intelligence, from analyzing medical images and workflows to creating summary diagnostic reports. The report identified more than 200 reported use cases across the system. As we were preparing for this hearing, my staff had told me about some, even very early prototype AI systems that the VA had integrated decades ago.

In clinical care, AI can help doctors detect cancer earlier and identify warning signs of heart disease before a crisis occurs.

A recent study led by VA researchers at the VA Long Beach Health Care System showed how AI can enable providers to detect the risk of calcium buildup in heart arteries. This new technology could give providers the chance to prevent heart attacks rather

than respond to them.

AI is also being used to enhance mental healthcare. One of the greatest challenges we face as a Nation remains around veteran suicide. In 2017, VA launched the react vet program—or the Recovery Engagement and Coordination for Health Veterans Enhanced Treatment (REACH VET) program. This program uses an AI model to help identify a very small group of veterans who are at the greatest risk of suicide. The results were promising. The program helped VA step in early, guiding veterans to care before crisis strikes.

It is not just about medical breakthroughs. AI is also helping doctors and nurses relieve the day-to-day burden of paperwork and things that are not spending time with the patients. The most common complaint from providers is that they spend too much time filling forms and not enough time taking care of their patients.

filling forms and not enough time taking care of their patients. The VA is exploring AI tools, like Ambient scribes, which can listen to a provider's conversation with the patient and automatically create a clean and accurate medical note. On average, this saves providers 2 or 3 hours per week. Now multiply that across thousands of staff. It means more time spent caring for veterans and less time staring at a computer screen and doing paperwork. The promise of AI is real. I want to be clear: Our job here is not applaud the promise. It is to make sure that AI is being used responsibly, safely, and transparently. Every great innovation comes with risk, and AI is of course no exception. If the data is biased, the results can be unfair. If safeguards are weak, privacy is compromised. If the systems are not carefully monitored, mistakes could harm the very people they are trying to protect. That is why the governance of AI matters.

The VA has been one of the first agencies in the government to step up a framework for how AI should be reviewed and approved. By law, VA already has some of the strongest privacy protections in government, and those protections extend directly to AI technology in veterans health and benefits, that it cannot be used by vendors for other purposes, period. We are going to hear more about that today.

Veterans deserve to know when AI is being used in their care. They deserve to know the technology has been tested and that it is working for them, not against them. Congress deserves to see evidence that taxpayer dollars are being well-spent.

I see today's hearing as an opportunity to highlight what is working, to dig into what still needs improvement, and to set clear

expectations for the road ahead.

AI does not and will not replace doctors or nurses, nor the human touch that every veteran deserves when receiving their care. Done right, AI can give clinicians another tool in their tool box, helping them focus more on patients and ultimately on saving lives.

We need to find the balance between moving efficiently enough to give veterans the benefit of innovation and cautiously enough to make sure that no veteran is put at risk. Our veterans should never be guinea pigs for untested technology, but they should also not be denied the benefits of safe and proven innovations.

This subcommittee will hold VA to that standard, and I intend to make sure that we get it right. It is not about technology; it is about trust. Veterans give this Nation their trust through their service. When they in turn go to the VA, they deserve to know that trust will be given back and honored. It is our duty to make sure that that trust is never broken. I know the ranking member will join me in this pursuit, and I appreciate your joining me in this committee today.

Then, last, before I yield to her, I sat next to another physician on my flight here last night. We were talking about AI and actually about this hearing coming up. She was saying, "We are never going to replace the element of patient care that is done by doctors, nurses, and other medical professionals." If we can expand the reach that they have, look at it as, in the Army, we used to say a force multiplier to deliver benefits in a more deliberative fashion that benefits everybody. That is what we ought to be pursuing here.

With that, I will yield to Ranking Member Budzinski for your opening statement.

OPENING STATEMENT OF NIKKI BUDZINSKI, RANKING MEMBER

Ms. Budzinski. Thank you very much, Chairman Barrett. I appreciate our subcommittee coming together to have a frank conversation about the underlying Information Technology (IT) challenges at the Department of Veterans Affairs and how we can support the VA in closing those gaps through technology.

port the VA in closing those gaps through technology.

However, today's review of artificial intelligence use cases at the Veterans Health Administration (VHA) feels like a distraction. VA is struggling with the basics. We are here discussing the newest technologies while the VA is still working with a crumbling IT infrastructure and still grapples to modernize systems and workflows.

As the ranking member on the Technology Modernization Subcommittee, I am certainly excited by the potential of both AI and innovation. AI could improve some of VA's challenges through large language models and higher processing speeds. We have seen promising studies of providers using AI to identify cancers more easily, improve patient outcomes, and ease clinician burnout by taking on more administrative tasks.

The VA has certainly been the leader in the research and development and widespread usage of a number of significant and groundbreaking technologies. It stands to do so again with AI. However, success in these efforts requires adequate resources and investments in its budgets, its processes, and its people. Veterans choose VA for the community it provides, the people it employs, and for the fact that it is not driven by profit.

What VA does best is make veterans feel seen and understood. As we have seen, AI can be a tool to provide decision support, ease provider burdens, and help with notetaking so doctors can be more present with the patient. We should also acknowledge that it is not the answer to every challenge the VA faces. Also, we as a com-

mittee and as Congress need to have a real conversation about AI policy and how to implement it safely. I am excited about the opportunities that AI presents. I am not convinced that VA is prepared to deploy this technology just yet.

I have a number of concerns that I hope to address today, like the lack of regulation and governance structures and the need for better transparency around what data is involved in training such

models.

Further, like all technology modernization efforts, implementing AI successfully requires a highly skilled, adequately staffed workforce. Almost 2 weeks ago, the acting head of the Department on Government Efficiency stressed the need to "hire and empower great tech talent in government." I could not agree more with that. However, I think we should all note the irony of that statement considering Office of Information and Technology (OIT) is proposing a massive reorganization and intends to cut at least 20 percent of its workforce.

Success is also reliant on strong IT leadership. If OIT is in fact undergoing significant changes to its organizational structure, priorities list, and workforce makeup, we need a confirmed Chief Information Officer (CIO) at VA. This position is particularly critical as we see the acceleration and progression of modernization efforts at the Department. It seems the VA still lacks a coherent enterprise IT strategy, leaving projects AI integration to happen in silos. Without stable and competent leadership, veterans and VA employees will continue to be stuck with cobbled-together systems and workflows that do not meet their needs rather than a solid strategy for technology usage to guide its decision-making.

I hope that we can get some clarity into the administration's plan to propose a nominee for the CIO position and that one can be con-

firmed before many of these substantial changes occur.

Last, I understand this subcommittee held a similar hearing in January 2024, though neither I nor the chairman were on this subcommittee at that point. In that hearing, data privacy was an intrinsic part of the discussion. I hope that it still is the case today.

As we become more interconnected through technology advancements like artificial intelligence, we must become increasingly aware of the concerns about the privacy of users' data, especially in healthcare. Since this last hearing, the Department has been entangled in multiple cybersecurity incidents, which have potentially placed veterans' data at risk. Though many of these breaches have been targeted at VA contractors, veterans' data has still been implicated, and VA maintains some responsibility for its safety. Though I do feel that this hearing is perhaps too early, considering VA has yet to develop and release some of its policies and plans to align its efforts with the administration's, I hope to hear from our VA witnesses today about how data privacy and security, as well as the views of both VA employees and patients, will be integrated into such plans.

Thank you and I yield back, Mr. Chairman.

Mr. Barrett. Thank you, Ranking Member Budzinski.

I join you in making sure that we have adequate ethics guardrails around this, and certainly privacy is paramount in that as well. I now want to introduce our witnesses. Again, thank you for joining us today from the Department of Veterans Affairs, we have Mr. Charles Worthington, the Chief Technology Officer and Chief Artificial Intelligence Officer. Thank you for being here. Accompanying Mr. Worthington is Dr. Evan Carey, Acting Director over the National Artificial Intelligence Institute at the VA. We also have Mr. Sid Ghatak.

Did I say that correctly?

Mr. GHATAK. Yes, sir.

Mr. Barrett. Thank you. The chief technical advisor from the National Artificial Intelligence Association. Dr. Mohammad Ghassemi, assistant professor at Michigan State University. Go green.

Dr. Ghassemi. Go white.

Mr. Barrett. Thank you for being here today as well.

Finally, from the Government Accountability Office we have Ms. Carol Harris, a familiar face to all of us on this committee. Thank you again for being here and joining us. She is also Director of IT and Cybersecurity at the GAO. Again, thank you all for being here.

At this time, I ask the witnesses to please stand and raise your

right-hand.

[Witnesses sworn.]

Mr. BARRETT. Thank you. Let the record reflect that all witnesses have answered in the affirmative.

Mr. Charles Worthington, you are now recognized for 5 minutes to deliver your opening statement on behalf of VA.

STATEMENT OF CHARLES WORTHINGTON

Mr. Worthington. Chairman Barrett, Ranking Member Budzinski, and distinguished members of the subcommittee, thank you for the opportunity to discuss the Department of Veterans Affairs' use of artificial intelligence to enhance healthcare and services for veterans.

Your steadfast support of the veterans and their families is invaluable. I am joined today by Dr. Evan Carey, Acting Director of the National AI Institute in the Digital Health Office of the Veterans Health Administration.

While AI is not new to VA, recent advancements in AI systems presents a tremendous opportunity to improve VA's services. When used effectively, AI can improve the efficiency and accuracy of many time-consuming and error-prone tasks that create burdens for VA staff and veterans alike. That is why VA is rapidly working to capitalize on this technology.

Our strategic vision is to make VA a leader in AI, providing faster services, higher quality care, and more cost-effective operations. We will aggressively deploy this new technology while remaining committed to strong controls that ensure security, privacy, and effectiveness of our technology systems.

We have distilled this vision into five key priorities. First, we are aggressively expanding AI across our workforce. Second, we are reimagining high-impact workflows through AI and automation.

Third we are prioritizing investment in data and infrastructure that supports those high potential use cases.

Fourth, we are cultivating an AI-ready workforce. Finally, we are executing transparent and effective governance, an essential requirement to maintain veterans' trust. We are already bringing the strategy to life, making significant investments in AI-driven tools.

In 2024, our AI inventory had 227 use cases in it, which was nearly 100 more than the previous year. We expect this growth to continue in 2025 as we prepare for our December update to that inventory. These investments are delivering tangible results. I am pleased to report that all VA employees now have access to secure generative AI tool to assist them with their work. In surveys, users of this tool are reporting that it is saving them over 2 hours per week.

Additionally, over 2,000 VA staff and contract and software developers are using an AI software development copilot tool, enabling faster delivery of features that help veterans. AI is also revolutionizing clinical care. In fact, 82 percent of VA's AI use cases come from the Veterans Health Administration.

VA's stratification tool for opioid risk mitigation uses machine learning to identify veterans at high risk of overdose and suicide, enabling healthcare teams to review and intervene effectively. Since 2017, the REACH VET program, as you mentioned, has used AI answer algorithms to identify over 130,000 veterans at elevated risk, improving outpatient care and reducing suicide attempts.

AI-assisted colonoscopy devices have increased adenoma detection rates by 21 percent, reducing late stage cancer incidents and mortality. Thanks to groundbreaking research by folks like Dr. Raffi Hagopian and Dr. Evan Carey, the VA is exploring how AI could help providers detect heart disease earlier by reviewing the millions of Computed Tomography (CT) scans that are not currently evaluated for cardiovascular disease risk at all.

As we advance our AI deployments, protecting veterans' data remains paramount. All AI systems approved for use at VA must meet VA rigorous security and privacy standards before receiving an authority to operate. Additionally, consistent with Office of Management and Budget's (OMB) policy, we conduct a thorough agency-level review of each AI use case to ensure that it meets the government the standards.

We will publish the results of this review in our annual AI inventory, positioning us as one of the most transparent healthcare systems in the country with regards to our use of artificial intelligence.

Despite our progress, adopting AI tools does present challenges. As you mentioned, integrating new AI solutions with a complex system architecture and balancing innovation with stringent security compliance is crucial. Recruiting and retaining AI talent remains difficult. Scaling commercial AI tools incurs additional costs. This underscores the importance of full congressional funding for VA to continue this critical work.

In conclusion, the Department of Veterans Affairs is committed to harnessing AI to improve the lives of veterans. Through strategic investments in AI tools and workforce capabilities, we strive to it deliver faster, higher quality, and more cost-effective services. Your continued support is vital for VA to lead in AI innovation and set a benchmark for responsible AI use in government.

Thank you for the opportunity to discuss our strategy, and we look forward to your questions.

[The Prepared Statement Of Charles Worthington Appears In The Appendix]

Mr. Barrett. Thank you, Mr. Worthington.

The written statement of Mr. Worthington will be entered into the hearing record.

Mr. Ghatak, you are now recognized for 5 minutes to deliver your opening statement.

STATEMENT OF SID GHATAK

Mr. Ghatak. My name is Sid Ghatak, and for almost three decades, I have designed and deployed artificial intelligence forecasting systems across finance, healthcare, pharmaceuticals, media, and government.

I currently serve as the chief technology adviser for the National Artificial Intelligence Association, the premier organization representing 1,500 businesses in the advancement of AI. I am also the founder and chief executive officer of Increase Alpha, where we use artificial intelligence to predict stock prices, and we license these

predictions to hedge funds.

In the Federal Government, I served in the General Services Administration for 4 years where I was a Director of the Data and Analytics Center of Excellence. In that role, I coauthored the Federal AI maturity model 3 years before AI took the world by storm. I also contributed previous executive orders on the critical issues of data privacy and data security. At Increase Alpha, I increased a predict—architected a predictive AI model that generates off of once thought impossible, a deep learning system that is exceptionally accurate at predicting equity prices. Increase Alpha far exceeds multiple industry benchmarks, including accuracy, sharp ratio, and alpha generation. The solution itself is not based on large language models at all, but it is purpose built, designed for this specific need.

I want to emphasize that this company and our solution is completely unrelated to the Department of Veterans Affairs, and it has no bearing on today's testimony. I mention it only as an example of how AI, when carefully designed with a clear purpose, can

achieve exceptional effectiveness.

Taken together, this diverse background, spanning academia and government and industry, has given me the rare opportunity to actually build AI systems that work well in the real world. I have spent my career outside the orthodox roles of academia, venture capital, and Big Tech, I am also not beholden to herd mentality. Instead, I bring an expert independent perspective, which is especially valuable now when much of the world is caught up in the art of the possible with AI when what is most urgently needed is a sober understanding of what is safe, practical, and ready to serve the public.

Large Language Models (LLM) like ChatGPT, Claude, and Gemini are a powerful subset of AI, but they come with their own set of problems, specifically in healthcare where hallucinations and sycophancy on the part of ChatBots can lead susceptible users down psychological rabbit holes, which is why it is important to clarify that AI is bigger than just ChatGPT and its competitors. To

use an analogy, the steam engine transformed society, fueling the Industrial Revolution. While steam power exists today, it gave way to other forms of power over time. Until steam engines were used to create the first railroads, no human had ever traveled faster than a horse. This new form of transportation opened the world's eyes to what is possible, just as ChatGPT has shown the world the art of a possible with artificial intelligence. Early train travel was dangerously unreliable. Accidents were frequent, derailments common, and thousands of lives were lost before rail systems matured into safe networks that we know today.

The lesson is clear: Revolutionary technologies will evolve and improve over time when the private sector and the government work in collaboration. The same applies to artificial intelligence. As the committee gathers information on how to modernize technology at the VA, I would like to offer a few pieces of advice from my many decades on the front lines of building and implementing ad-

vanced analytical solutions.

As I mentioned, the last several years, the world has been consumed with LLMs to the point where AI has become synonymous with it. However, that is not the case. Many other types of AI may have similarities to these models but function very differently, technologies that specialize in interpreting and understanding images, video, and audio, for example, or technologies that are better suited to working with numbers and symbols instead of words, a new technology that is yet to be invented.

There is an old adage about, when you are a hammer, everything likes like a nail. The world has become so enamored with LLMs, and rightfully so, interacting with them can feel magical, giving you the sense that they are real people, but they are not. This may be why little to no investment is being made in these other areas. At Increase Alpha, we demonstrate clearly what can be done with other forms of artificial intelligence. I began building our models at the same time as the research underlying ChatGPT was published. I had also encountered the same compute cost energy and reliance on a video that we still see today. I took a different approach to conserve resources and focus on simplification, using predictive intelligence which led to leading AI models that use a minuscule amount of data compared to LLMs and which are small enough to run on a cell phone.

What does all this mean for the VA and the well-being and care of veterans? I do not claim to know. No one really does. I want to leave you with a prediction: I believe that we truly are on the verge of a scale—of a revolution on the scale of the Industrial Revolution. If I could leave you with one idea today, it would be this: AI is much bigger than today's LLMs. It is these technologies, many of which have yet to be invented, that will enable the VA to execute on its mission. Thank you.

[THE PREPARED STATEMENT OF SID GHATAK APPEARS IN THE APPENDIX]

Mr. BARRETT. Thank you, Mr. Ghatak.

The written statement of Mr. Ghatak will be entered into the hearing record. I appreciate your remarks. I think, if we all use ChatGPT for cat memes, it will not be meeting its full potential and leaving a lot of things behind. Thank you.

Dr. Ghassemi, you are now recognized for 5 minutes for your opening statement.

STATEMENT OF MOHAMMAD GHASSEMI

Dr. Ghassemi. Chairman, Ranking Member, and members of the subcommittee. Thank you for the opportunity to speak today. I am a scientist and an entrepreneur focused on artificial intelligence but especially its applications to healthcare. The views I am going to share today are my own, but they are informed by roles I played as a professor at Michigan State University, where I direct a research laboratory on AI and its applications to health sciences.

I am also going to bring a perspective as the founder of an AI consultancy Gamut Corporation, which has helped large pharmaceutical companies, insurance companies, as well as health sys-

tems, plan and execute their AI strategy.

I want to be clear: I am not a veteran health specialist. My perspective is on how artificial intelligence can broadly advance care in ways directly relevant to the needs of patients, and this very

critically includes our veterans.

This subcommittee has identified in their invitation letter three priorities for AI health. These were transforming healthcare delivery, streamlining services, and improving outcomes. I am going to frame my remarks around three roles that AI can play to help with these three priorities. The three roles are automation, which is reducing low-value work through the use of machines; augmentation, which is having a machine assist a human in a task, so to strengthen clinical decision-making, as an example; and insights, which is allowing us to extract complex patterns from data, patterns far too complex for us to discern just with our human intuitions alone. Let us talk about three.

First, AI can transform what happens during care itself. Clinicians today spend hours on paperwork, but AI scribes can generate notes automatically so they can focus more fully on patients. We have heard that from more than one person in the conversation today.

In emergency rooms, decision tools powered by AI can help identify the sickest patient sooner and get them treated faster. Continuous monitoring assistance can pick up on the early signs of decline, like sepsis, long before they would be obvious to our human eyes. These tools make the encounter safer, timelier, and more patient-centered.

Second, AI cannot only streamline what happens during care; it can streamline the plumbing of healthcare itself. Missed appointments waste scarce clinician time. Automated reminder systems, which do not have to use a large language model or a sophisticated tool like ChatGPT, can reduce these no-shows and save that time. Patients also too often fall between the cracks between primary care and specialist visits. AI can flag the missing referral information, track follow up, and prevent all these gaps. When imaging or labs reveal unexpected findings, like, God forbid, a lung nodule discovered by chance, AI tracking systems can ensure these findings are followed up on so that the treatable conditions do not get overlooked. This is how we reduce wasted effort and ensure smoother, more reliable care.

In conclusion, artificial intelligence is not a silver bullet. I say this as a person who has been working on developing the methods for several years, but it can already help with the subcommittee's three priorities. It works best when it reduces low-value work, strengthens rather than replaces clinical judgment, and turns complex data into actionable insights.

To succeed, we need disciplined pilots, clear metrics, and safeguards for safety, equity, and privacy. If deployed with care, AI can return time from paperwork to patients, ensure that critical findings are not missed, and support clinicians in their hardest decisions

I look forward to our conversation. I am grateful for the invitation to be here with you today.

[THE PREPARED STATEMENT OF MOHAMMAD GHASSEMI APPEARS IN THE APPENDIX]

Mr. BARRETT. Thank you, doc.

The written statement of Dr. Ghassemi will be entered into the hearing record.

Ms. Harris, you are now recognized for 5 minutes to deliver your opening statement on behalf of GAO.

STATEMENT OF CAROL HARRIS

Mr. Harris. Chairman Barrett, Ranking Member Budzinski, and members of the subcommittee, thank you for inviting us to testify today on the use of artificial intelligence at VA. Develops in generative AI, which is a subset of AI, which can create text, images, video, and other content when prompted by a user, have revolutionized how the technology can be used in many industries, including healthcare and at VA and other Federal agencies.

AI holds substantial promise for improving the operations of government agencies. However, it can increase risk for agencies and poses unique oversight challenges because the source of information used by AI is not always clear or accurate. Given the fast pace at which AI is evolving, the government must be proactive in understanding its complexities, risks, and societal consequences.

It should also be noted that VA has experienced longstanding challenges in managing its IT projects and programs, raising questions about the efficiency and effectiveness of its operations and its ability to deliver intended capabilities.

As requested, I will briefly summarize our prior work on the Department's AI use and challenges, as well as principles and key practices for Federal agencies, including VA, that are considering and implementing AI systems.

In July 2025, we reported that VA's AI use cases increased from 40 in 2023 to 229 in 2024. For example, VA is a developing a generative AI use to automate various medical imaging processes. This use may enhance VA's ability to analyze medical images, integrate existing and new data workflows, and create summary diagnostic reports.

In the health and medical sector, agencies have adopted generative AI to advance medical research and improve public outcomes, including at VA. It is also worth noting that, of the 229 use cases, 64 percent were considered to be high-impact AI, meaning that their capabilities impact the rights and/or safety of individuals or

entities. Looking at just VHA, that percentage increases to 72 percent.

The Department also reported to us a number of challenges they face in using and managing generative AI. The full list is noted in my written statement. I will only highlight a few here.

Challenge one, complying with existing Federal policies and guidance. VA officials shared that the existing Federal AI policy can present obstacles to the adoption of generative AI, including in the

areas of cybersecurity, data privacy, and IT acquisitions.

Challenge number two, having sufficient technical resources and budget. Gen AI can require infrastructure with significant computational and technical resources. VA noted challenges in obtaining or accessing the needed technical resources and also in having the funding necessary to establish those resources and support desired AI initiatives.

The last challenge, hiring and developing an AI workforce. Among other things, the VA reported difficulties in establishing and providing ongoing education and technical skills development for their current workforce.

VA officials told us they are working toward implementing the new AI requirements in OMB's April 2025 memorandum. Doing so will provide opportunities to develop and publicly release AI strategies for identifying and removing barriers and addressing the challenges I noted.

Additionally, the GAO has identified a framework of key practices to help ensure accountability and responsible AI use in the design development, deployment, and continuous monitoring of AI systems.

Our framework is organized around four complimentary principles that address governance, data, performance, and monitoring. Consideration of the key practices in this framework can help VA as it considers, collects, and implements AI systems.

Last, I will mention that we have 26 open recommendations to VA concerning the management of its IT resources. If the Department implements these recommendations effectively, it will be better positioned to overcome its longstanding challenges in managing its IT resources and will improve its ability to address the rapidly changing AI landscape.

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

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

Mr. BARRETT. Thank you, Ms. Harris.

The written statement of Ms. Harris will be entered into the hearing record.

Again, thank you to all of our witnesses.

We will now proceed to questioning. I will recognize myself for

5 minutes to begin questioning.

I am going to start with Mr. Worthington. The VA—I know we have got a lot of concerns obviously about data security, data privacy, what can be used, what can be modeled off of veteran information. The VA requires vendors to sign contracts directly stipulating that it will prevent secondary use of veteran data. Number

one, can you kind of walk us through how that works? How are you

making sure that companies actually follow that rule?

Mr. Worthington. Thank you for the question, Chairman Barrett. I think it is extremely important that everyone understands that there is not a second set of rules for AI systems. In the VA, we have a very clear and stringent set of rules around both security and privacy for any technology system. Before we bring a system into production, we have to review that system for its compliance with those requirements and ensure that the partners that are working with us on those systems attest to and agree with those requirements. AI systems receive an authority to operate just like any other system would before we would put veteran data into the system.

Mr. Barrett. Okay. I appreciate that. For example, though, I know the large language model, kind of most stereotypical use of AI, we are going to be looking at, you know, the millions of records that the VA has and then modeling patient outcomes from that and then looking kind of retrospectively to see where people are on that spectrum today, and say, "Well, we know, if this condition led to 10 years later a worse condition over here, how can we stem that off earlier?" If we allow an AI vendor to have access to that to cultivate that knowledge, is that something that could be then used as an outgrowth in another way for, like, another I guess research tool for other things? For example, if a person has a predisposition to kidney disease or diabetes or something like that, we can look retrospectively at their health record to show that they had certain indicators ahead of time, would not we want that to be to the benefit of all medicine and not just within the VA?

Mr. Worthington. Yes. I think that, as you are mentioning, in the training phase of models, which VA does occasionally do, that, if we work with a vendor, we make sure that the agreements say that any protected health information can only be used for that specific purpose that we have contracted with. Often, that is taking

place in environments that VA already runs and controls.

Now when we are talking about using a large language model, those are provided typically via one of the big cloud service providers, and those environments are set aside in a VA boundary that basically the vendor has to attest that they already meet VA security requirements. When we are sending information to a large language model to get feedback back from that model, we are using a version of that model that has been made secure to meet government standards.

Mr. BARRETT. Okay. I will fully confess that I am not an expert on this. Would a large language model allow a practitioner to say, "I have a veteran presenting with these conditions; what are the risk factors that I ought to look for to, maybe run tests that would not ordinarily be otherwise top of mind?"

Mr. WORTHINGTON. There could be a variety of AI approaches for a use case like that. Dr. Carey may just quickly provide a couple of examples of those sorts of decisions support type use cases.

Dr. CAREY. Thank you. It is a fantastic question. I think there are two versions of that. As you note, there are tools where providers can get general advice, and they might specifically articulate the needs of the veteran and for the conditions that they are look-

ing for, to point out to sort of follow the different procedures that are recommended and identify the guidelines. Those tools are available within the VA.

Mr. Barrett. Okay. After the passage of the The Sergeant First Class Heath Robinson Honoring our Promise to Address Comprehensive Toxics (PACT) Act, you know, we have this burn pit registry and everything, and they are supposed to track veterans and conditions that arose from that. Obviously, the specific information about a particular veteran we want to have protected and not revealed. If there are outcomes of that that could be useful to, you know, human medicine in total, is there a way for that to be revealed?

Mr. WORTHINGTON. Yes, thank you for the question. VA does have, as you know, a very large amount of health data. We have a robust——

Mr. BARRETT. More than anybody in the world, I think.

Mr. WORTHINGTON. That is right. We have a robust tradition of research to advance not just VA healthcare but healthcare overall. We are seeing an increasing interest in using that data for AI-driven research papers, like the one that Dr. Carey recently wrote.

Mr. Barrett. Okay, and that is the—like the benefit but also the concern is we obviously have a large repository of medical data. If that is being used or to the benefit of a curator of artificial intelligence, should the VA be, you know, should that be brought into account for the cost of services and other things like that? What I do not want is for a provider to come in and leach that information out solely for their benefit while not providing a benefit to the VA and to the veterans as well.

Mr. Worthington. We agree.

Mr. BARRETT. Thank you. Ranking Member Budzinski.

Ms. Budzinski. Thank you, Mr. Chairman.

Dr. Carey and Mr. Worthington, thank you so much for both being here.

I understand that several of VA's AI use cases, like the ambient dictation pilot, intend to use an opt-in practice for consent. For systems that are perhaps less directly veteran-facing, like the use of AI in benefits determination or medical assessments, how is the Department educating veterans on these use cases to ensure for their awareness?

Mr. Worthington. At a very high level—and thank you for the question. We are using our AI use case inventory as the way to catalogue all of the uses of AI and make sure that that is publicly available. When there is not, as you mentioned, like a one-to-one interaction that provides the opportunity to explain directly what is happening, as there is in many healthcare settings, what we are relying on is our publishing of the overall AI strategy and use case to explain how the Department is using AI in various products and services.

Ms. Budzinski. Okay. Other than that general awareness—for veterans, is there any way to kind of draw their attention to this so that they know that, you know, what their situation might be using to inform an AI model?

Mr. Worthington. We are always listening for veterans' feedback through a variety of mechanisms and reacting to that. That is true of AI situations and non-AI situation. We certainly want to monitor this for AI in particular, because I think maintaining veterans' trust in VA as we introduce these new technologies is going to be critical.

Ms. Budzinski. Okay. Then, Mr. Worthington, I am glad that you and your teams are committed to the transparency in AI use cases at the Department. That is commendable. However, there have been reports that certain employees had access to certain data sets and systems within VA's enclave which may have been used for AI related operations. I have some specific employees I want to mention by name, and then I have some questions for you. I am going to ask about these employees: Justin Fulcher, Sahil Lavingia, Christopher Roussos, Payton Rehling, Cary Volpert, or Jon Koval. I am just looking for, like, a yes or no to these questions. Did you ever work with any of those individuals?

Mr. Worthington. Yes, I have come across several of them.

Ms. Budzinski. Okay. Are or were these individuals affiliated with the Department of Government Efficiency (DOGE)?

Mr. WORTHINGTON. I am not exactly clear on the relationship. I believe they are VA employees. At points, they were introduced as also being part of the DOGE movement.

Ms. Budzinski. Okay. Did any of these employees access data sets that included VA patient medical records or other personally identifiable information?

Mr. Worthington. I am not aware.

Ms. Budzinski. Okay. Were you or anyone you know ever asked to duplicate data sets by these employees?

Mr. Worthington. No, I was not.

Ms. Budzinski. Okay. Can you commit to me that no veteran's data was removed from the Department of Veterans Affairs?

Mr. WORTHINGTON. As far as I understand, all the VA employees follow all the VA IT security processes and procedures and that was a key priority for all of us and always is a key priority.

Ms. BŪDZINSKI. Okay, Okay. Mr. Worthington, almost 2 weeks ago, the Acting Director of the U.S. Digital Service noted that the Federal Government needs more tech employees to—and to hire and empower great talent. Do you believe that VA shares that sentiment?

Mr. Worthington. Yes, I do. I think having technologists in government is critically important, as is having great researchers and doctors.

Ms. Budzinski. Okay. Secretary Collins has often noted the importance of VA employees in direct care roles, disregarding the importance of what he might call support employees in the provision of this work. Do you believe that this type of rhetoric has helped the Department to recruit and retain tech talent?

Mr. Worthington. I think the good thing about working at the VA is our mission is so clear. The mission of serving veterans is the most important one that I have worked on in my tech career. I think there are many technologists across the country that are willing to sign up for that mission. I love trying to recruit those people on my team.

Ms. Budzinski. Ms. Harris, real quick on a follow up, GAO's Artificial Intelligence Accountability Framework notes the workforce is a key component to ensuring effective AI application. How does a highly skilled technical workforce ensure adequate scalability of

AI applications and protection of veteran data?

Mr. Harris. Well, while there is great excitement around AI because of the potential to improve operations, there is also significant concerns, the ones that I articulated earlier about cybersecurity, intellectual property, as well built-in bias in the AI system, as well as environmental and other concerns. We want to make sure that we have a workforce that understands both the potential of these systems but also understands the risks in the AI well. Having those two are vital.

Ms. Budzinski. Okay. Thank you.

I yield back.

Mr. BARRETT. Thank you.

Mr. Luttrell.

Mr. Luttrell. Mr. Chairman.

Mr. Ghassemi, you laid out a well-articulated plan of attack on how the VA could tackle this healthcare, artificial intelligence kind of combining of forces. The problem is you have—it sounds like you never worked with the U.S. Government because that is what kills this effort is the U.S. Government.

Ms. Harris, your opening statement was very well-articulated, and you hit every single point precisely. The problem is we have such an issue with the VA because it is a big machine, and we are trying to compound—we are trying to bring in artificial intelligence to streamline the process. You have 172 different VA facilities, plus satellite campuses, and that is 172 different silos. They do not work together. They do not communicate very well with each other. We have spent almost \$16 billion trying to push electronic healthcare records across multiple facilities. Now we are going to try to tackle artificial intelligence as well. In 2024, we had 229 AI actions. Correct, Mr. Worthington?

Mr. WORTHINGTON. Yes, approximately.

Mr. Luttrell. What site did that come from, because I would dare say that that did not come from all or every single VA installation. That sounds like to me that that is collected from, like, a few. Is that correct?

Mr. WORTHINGTON. We did attempt to have a pretty comprehensive review process to gather all of the uses of AI across the country. We—

Mr. LUTTRELL. I did not get anything out of that. That was almost a yes-or-no question, but go ahead again.

Mr. WORTHINGTON. Yes, I believe that AI is being used at facilities across the country. This inventory covers those uses.

Mr. Luttrell. The conversations I have with multiple sites is they do not have artificial intelligence capabilities because their sites are not ready or they do not have the infrastructure in place to do that, because we keep compounding software on top of software. Some sites cannot function at all with the new software they are trying to implement. That is a pretty fair statement, correct?

Mr. WORTHINGTON. I would agree that having standardized systems is a challenge at the VA. There is a bit of a difference in dif-

ferent facilities. Although I do think many of them are starting to use AI-assisted medical devices, for example, and a number of

those are covered in this inventory.

Mr. LUTTRELL. How do we fix this problem? Again, I am going to ask you, sir, because I usually ask everyone who sits in front of me from the VA: How would we fix this problem? Mr. Ghatak and Mr. Ghassemi have probably thought about this quite a bit before they showed up in front of us, but again they have not—actually, I do not know this for certain—I may be throwing this at you, and course correct me if you would like—but I do not think they have had to deal with the U.S. Government and also the VA. Now how long have you been in this position, sir?

Mr. WORTHINGTON. I have been at the VA nearly 10 years and

this position for about 2 years as chief AI officer.

Mr. LUTTRELL. Okay. What comes first, the communication between the sites and the ability to ask that information questions, which we do not do that or we do not have the ability to do that—do we run the implementation of artificial intelligence in parallel with that, or do we have to do one before the other?

Mr. Worthington. In my personal opinion, we cannot wait, because AI is here, whether we are ready or not. Increasingly, every solution we buy from our partners in the private sector is going to have it embedded inside of it. I think our challenge is we need to come up with very good standard templates that every site can use and allow those standard tools to be deployed, things like the VA GPT school that I mentioned, which is now available to every VA

employee in a standard way.

Mr. Luttrell. Since the Department of Veterans Affairs houses the most important data set on the planet arguably, and everyone wants to touch it, including Dr. Ghassemi at Michigan State—I would have to guess, especially when you were at Massachusetts Institute of Technology (MIT) in Cambridge I am sure. Pretty impressive resume, sir. Everybody is trying to touch it. Everybody wants to be a part of it, and you have to deal with every single subject-matter expert that walks through your door that says, "I am the best." I can assure you every one of those corporations and companies walks into our office as well. Question is, who is it? Who do you vet, and who is going to touch it, because it cannot be everybody? We do not have it—in my personal opinion, that I am not aware of, we do not have an enclave that can house all of that information where everybody can get in there and not steal it. Implementation of artificial intelligence, which we do not have the ability to regulate, so the question is who will do that, or do you have the AI system itself regulate itself?

Mr. WORTHINGTON. I think it is a great observation and concern; it is one we share. The reason why we are putting every AI use case through that review process is to ensure that, if it is being used with real veteran data, that it meets VA's stringent security

requirements.

Mr. Luttrell. Thank you, Mr. Chairman. Thank you, sir.

I yield back.

Mr. BARRETT. I thank you. Ms. Cherfilus-McCormick.

Ms. Cherfilus-McCormick. Thank you so much, thank you so much.

I wanted to kind of piggyback off of some of Representative Luttrell's questions. You mentioned standardization, and we know now, from doing this for years, that standardization in the VA has not been our strong suit. Are there any things that you have learned from our lack of standardization for all of our electronic medical records? We have been consistently having an issue there with standardization. I have two questions for you first. Are you confident that you can actually have a standardization mechanism that will be able to have a smooth transition implementation?

Mr. Worthington. Thank you for the question, and it is a critical topic for us. I do think that the investments this committee has helped make over the past years has helped with that. We do have, for example, in the space of decision support, we have an investment that allows AI-assisted decision support tools to be purchased or built and then deployed to every Veterans Health Information Systems and Technology Architecture (VistA) site and also to

every----

Ms. Cherfilus-McCormick. I guess my question really is, like I said, we have been trying to be successful here, and it has not been. How confident are you now? What are the missing links for standardization when it comes to AI, because AI has some complexities that I think we can all acknowledge, especially when it comes to biases? If we are going to implement AI into our system, we want to make sure that we have precise implementation, and we are also taking into consideration responsible implementation of AI, which actually addresses the biases immediately, that deals with security immediately. I was going to go into those questions first, but I said, "I cannot even go there if we do not deal with standardization." What have we learned? How confident are you, or should we really be taking some time to step back and look at standardization again but through a magnifying glass to make sure we get it right?

Mr. Worthington. I do feel confident that we are approaching this in an enterprise approach. That is why partnerships with the VHA and our colleagues, like Dr. Carey, is so critical. AI is both a new area—it is one we need to be able to experiment in before we commit to that enterprise solution. Then, once we commit, we do not want to have, you know, every medical center buying its own version of the same product. We have got a pretty careful balance of that innovation. We are doing structured pilots to help us decide what to purchase and what to deploy to the enterprise.

Ms. Cherfilus-McCormick. I wanted to talk more about the implementation development because we know that most of the biases will be during the development phase and also the implementation phase. What are you doing specifically to make sure that these biases are not being inherently put into the system, to make sure that all of our veterans actually have access to equitable care?

Mr. Worthington. That is a great question, and it is a concern that is of critical importance for us as we adopt AI. The Office of Management and Budget in their policy has determined, defined high-impact use cases. Those would be things involved in healthcare benefits. They have provided us a set of requirements

that any AI needs to meet before they are used. Some of the highlights of those are pre-deployment testing to make sure the model performs well across different demographic groups, but not just pre-deployment testing but also ongoing monitoring so that we can

make sure that the models perform over time.

Ms. Cherfilus-McCormick. Could you tell me how you are doing that? We have been reading—I have been loving this AI conversation I have been looking at through all spectrums. One of the articles that I am going to actually ask to put into the record, it talks about the clinical decision-making the implementations. I also want to hear from Ms. Harris about, are we matching the need right now to identify bias?

Mr. WORTHINGTON. I do believe that we, through the AI use case control process and the governance we put in place with our partners in VHA, that we do have a commitment from all the use case

owners to meet those standards in the OMB requirements.

Ms. Cherfilus-McCormick. Ms. Harris, what would you like to see when it comes to actually being vigilant on making sure that

we are not utilizing a system that has inherent biases in it?

Mr. Harris. For sure. One thing to note—even Mr. Worthington talked about these high-impact systems—VHA has 72 percent of their AI use cases as being high impact, so meaning that they affect people and entities and their rights. That is quite a number, a high number of systems that have that implication. Yes, you have to go through additional hoops, as he had mentioned, with pre-deployment and during monitoring to make sure that, you know, rights are not compromised. The VA has told us that there is a need for more privacy officers to handle increased data security demands. We would like to see more of those positions being filled to ensure that privacy is really taken care of as it relates to these high-impact uses case.

Ms. Cherfilus-McCormick. I have a few seconds left, but I did want to ask Dr. Ghassemi, are there any cases that you have seen in public usage or private usage where they have done an excellent job in actually removing the biases, identifying them immediately?

Dr. Ghassemi. There is a really active domain of researchers who are trying to solve exactly that problem. A lot of the studies are happening with, for example, the Medical Information Mart for Intensive Care (MIMIC) data base, which is based out of the Boston area, something that I actually contributed to.

To summarize, I think the broader domain of that research activity, in a few words, is it is possible to do it, but it requires a thoughtful approach, and each data set is different. What you have in the VA and the bias in that will be different than if you are doing it in the context of a data set in Boston with somewhere else.

Ms. CHERFILUS-McCormick. Thank you. I yield back. Thank you

for your time.

Mr. BARRETT. Thank you.

I will recognize myself for 5 minutes again.

Dr. Ghassemi, I wanted to come back to you, and you have listened to some of the back and forth testimony and some of the responses, both from the VA and from members here. You are outside of the VA. You have the benefit of being removed from some of this internal stuff. I am curious, you know, kind of what your thoughts

are to me, and to Mr. Luttrell's point is we are trying to upgrade this legacy health record system on a I guess parallel track, to use the term you used. We are trying to modernize some of the easy lift items that can be done through assisted technology or augmented, I think somebody said in their testimony as well. Do you think that is achievable, number one? You know, how do you think that the VA can do this responsibly to make sure that it is done in the appropriate way?

Dr. Ghassemi. The short answer is I think it is achievable. How can it be done responsibly? It has to start first and foremost with unification of the data. I heard earlier conversations that

Mr. Barrett. In unification of data, are you talking about having a singular system, or are you talking about the data itself not being fragmented across all these different VA facilities?

Dr. Ghassemi. What I mean is that you need a singular way to represent the data so that an AI system that operates in one system can move and operate in another. Now, actually the good news is that artificial intelligence can be used to help with that unification process itself. I will speak about some of my external experiences here and say why I think there is room to be helpful. It is a common problem in industry for corporations to deal with. They have a large data base of customers, or health systems have a large data base of patients, and they want to enrich that with some data from outside of their ecosystem. That is a common problem. There is reconciliation of two complex data sets where column names in these data sets do not match, representations of values inside these data sets do not match. There is so many things that are misaligned here. The same, instead of thinking of Al's role as coming in after you gave done a very heavy duty and costly and inglorious task of aligning that data, you can use the AI tools to perform alignment of that data, right, to ask how you do the combination of the information, the debiasing considerations that were brought up earlier, and so on.

Mr. BARRETT. Thank you, I appreciate that. How do you think balancing, you know, the access to this and the benefit that comes from it with keeping the paramount interest of, you know, veterans' consent and privacy and all of those things that we cannot miss the mark on as well? I would be interested in your thoughts

on that.

Dr. Ghassemi. Yes, I think disclosure is really important transparency. You know, when we go to a supermarket and we turn around an item that is on the shelf? On the back is disclosed to us through nutrition label what are the contents inside of the food that we purchase. In a similar way, if you think of care that we receive as an item, then you need a similar way to inspect what components, which parts of the ingredients in that care came from which sources. Did they come from a model that Oracle trained on their Cerner ecosystem? Did they come from an academic paper? Did they come from a clinician's judgment? The traceability of that decision and making it transparent back to the end consumer of the care, which is the veteran, that is really important because they have a right to know how care is being derived prior to consenting to receive it. I think that transparency sits at the beating heart of doing this correctly. The reason there is trepidation, as far

as I understand it, behind the use of AI—not just in healthcare by the way, but in a large number of industries, is because the transparency is an issue, right? It could tell you—hallucinations—I think maybe some of you have heard of this concept. If you have not, I will quickly define it—is when a model basically confidently tells you the wrong answer. There are ways to overcome this. They require some expertise, but it is solvable.

Mr. BARRETT. Thank you. I appreciate it. I am out of time. Ranking Member Budzinski, I will recognize for you 5 minutes. Ms. Budzinski. Thank you very much. September is Suicide Prevention Month, and our full committee has not had a hearing for many years on suicide prevention, which I think is something that is a very big missed opportunity and something I am hoping we can be getting to.

I can use this opportunity at this subcommittee hearing to ask the VA some questions around suicide prevention and then the connection with AI and how AI might be a useful tool suicide in prevention, like the REACH VET algorithm model, in particular. My question is for actually Dr. Carey. Can you speak to how VA is

planning to use its AI inventory to build on this success?

Dr. CAREY. Absolutely. Thank you so much for the question. As you know, it is incredibly important that we take care of our veterans, especially in this context of mental health needs. We have been operating the REACH VET model for a number of years, as Mr. Worthington noted, since 2017 successfully. We have updated that model recently to ensure it has ongoing high performance of identifying identification of veterans at the highest risk core tiles. Then we implement that model as part of a multipronged strategy to ensure veterans get the care they need. Their receipt of the care they need does not depend only on identification of an AI tool or being flagged as being at high risk. It is just one of many strategies we use to ensure that veterans are regularly screened, and, as you noted, in the opening statement, if anybody falls through the cracks, that they have an opportunity to still receive the care they

Ms. Budzinski. One of my concerns is just we do not want to prevent human involvement from being a part of suicide prevention. We can use AI as a tool. How does the VA look at-you know, working to ensure that human involvement is not eliminated as a part of the critical nature of the care that we want to be able to provide

to a veteran with suicide prevention efforts?

Dr. CAREY. Thank you. That is a fantastic question, and we completely agree. I want to make it absolutely clear that VA clinicians deliver care to veterans. VA clinicians are in control of the care that veterans receive. While we do use AI tools to surface risks and ensure that all veterans are flagged to get the care they need, what happens next is that a human at the VA reaches out to that veteran, where it first reviews the information and decides if outreach

Ms. Budzinski. Okay. Could you commit for me that the VA will never use AI, including chatbots, as a substitute for frontline staff

responders for mental health crisis intervention?

Dr. Carey. We do not currently have any plans that I am aware of to use AI as a treatment device instead of providers. I personally have been a part of many conversations where we ensure that continues to be the case.

Ms. Budzinski. Okay. Thank you.

Ms. Harris, could I ask, what risks are posed by using AI tools for use cases other than their intended purpose, like the use of chatbots that were developed for programs like Veterans Readiness and Employment (VR&E) or home loans and crisis intervention support?

Ms. Harris. Well, I think that there would be significant risks

in a tool that is not being performed as intended.

For example, if you are using an AI chatbot for one program, but, you know, obviously if you use that same bot for another program, it is going to produce poor results. That is because the data that was used to teach that tool would not be relevant to the expected role for that other program. We would certainly think that there is significant risks in dealing with what you have asked.

Ms. Budzinski. Okay. Then I guess the VA's Office of Inspector General reported in April that Veterans Benefits Administrations (VBA) automated decision support tool was ineffective in helping claims processes assign the correct effective date for PACT Act claims. This resulted in at least \$7 billion in improper payments. I worry that VHA's rushed to expand automation will lead to similar errors that could put patients at risk.

Shifting gears, Mr. Worthington, how do you plan to measure ac-

curacy of implemented and piloted AI tools?

Mr. Worthington. That is a great question. I think by having all of the use cases documented, along with the owner of each AI use case, we will have the consistency plans available to us so that then our colleagues and VHA can be regularly following up to see what they found. We agree that continuous monitoring of AI in production is very important.

I do think our healthcare system is particularly well designed to monitor for those sorts of things because that is part of what they

do in a non-AI context as well.

Ms. Budzinski. Okay. Just a quick follow up. At the hearing on this topic, Mr. Worthington, last year, you mentioned that the key to understanding how any particular AI may introduce biases is to understand the data that it was trained on and the outputs it provides.

Considering the efforts of this administration to limit what kind of data may be available in research data sets or in a veteran's medical file, do you believe that this will impact the efficacy of VA's AI tools?

Mr. Worthington. I would have to get into the specifics of any given case. I think, at a high level, it is very important to understand what data went into the training and do pre-deployment testing before we use something in production.

Ms. Budzinski. Okay.

I yield back.

Mr. Barrett. Thank you. I will now recognize Mr. Luttrell.

Mr. LUTTRELL. Thank you, Mr. Chairman.

Dr. Ghassemi, I am fascinated with your previous statement. Clean data, dirty data, retrospective, prospective data, the transfer

of information is very challenging. I am not going to say impossible. I will never say that.

Currently, the VA does not house all of veterans' data. It sits in the different silos of the different hospitals. I think the death records lives in one spot, but everyone else is assimilated, right? Correct?

Mr. Worthington. There is definitely siloed systems, although

our health data is pretty consolidated.

Mr. Luttrell. Consolidated. It make senses to me—and I do not know the price tag on this, if this is even possible, that if all the data lived in one enclave, the entire veterans space lived under just say the VA data center—which I do not even know what that would look like—but then the VA could control access to anybody, including all the sites, plus every single university and research student, whoever it wants to touch it, and they could prevent the ability for data theft. Is that a fair statement? Anybody?

Mr. WORTHINGTON. I do think that consolidating data into secure platforms can be a good enabler of this sort of technology for sure.

Mr. LUTTRELL. Are we even having that discussion inside the VA? You can say no.

Mr. WORTHINGTON. Yes, we were actively working and, in fact, have done a number of data consolidations to make that possible.

Mr. LUTTRELL. I have been here for about 3 years now, and the word "activity working," it does not really resonate in this place.

Are we really wanting to do this, or is this just something that

is just something you are throwing at me?

Mr. WORTHINGTON. No, I think like an example, like the REACH Vet model that we just tried is a model that was created based on that consolidated data set that draws on data from all the different medical centers as well as other data into one central data warehouse.

Mr. LUTTRELL. Everybody can touch it. If somebody in Conroe, Texas, a VA facility that I have says, "Hey, look I have a veteran here that has this," they can reach out to that data center, populate from tens of trillions of data points, and send back, "Hey, most likely this is what we are looking at"?

Mr. Worthington. Well, when you are using it—it gets complicated quickly, as you know.

Mr. Luttrell. I know.

Mr. Worthington. Different use cases have different degrees of connectedness. In terms of building places where we can create those models that we just went through like REACH VET, we do already have investments that help with that.

Mr. LUTTRELL. Okay. If we do have the willingness to do this, somebody is going to have to have the software in place to do it. Mr. Ghatak, I am not going to let you out of here without saying something. Okay.

Who can handle something like this? Company-wise, industry, whoever? Do not say Michigan State because you are sitting in the room with me.

Mr. Ghatak. No, sir. I would say University of Michigan where I went to school, they could probably take—

Mr. LUTTRELL. They are pretty good, too? Okay. Yes.

Mr. Ghatak. Sir, I spent 4 years in the Federal Government, I have worked in the General Services Administration under Technology Transformation Services (TTS), and I had the opportunity to work with a lot of different agencies in that capacity. What I saw there was what I had seen throughout my commercial career, which is, as I put in my written statement, organizations have way more data than they realize. That data exists in more locations than they are aware of. That data means different things in different places at the fundamental root level in terms of where the data exist. The number one reason that projects fail—if it is an AI project or if it is any other technology project, it is because of the data. If the data is not there, then no matter what position, what solution you have, it will never really work. It is sort of like what we call lipstick on a pig, in other words. You have to solve that problem.

Now, who solves that problem? That is an enterprise wide problem. That is an enterprise wide acknowledgment that the problem exists, and then an enterprise wide effort to make the investment

in solving that problem from a—

Mr. Luttrell. Multiple agencies are going to have to come in on

top of this.

Mr. Ghatak. I would say multiple departments within an agency would report up through a business leader, a chief officer, reporting up at the highest level to make that investment and to solve that problem at the fundamental level. Because if it is not solved fundamentally, then the underlying structure of any solution will not work.

Mr. LUTTRELL. I am going to make the assumption, which I probably should not. This is what is going to have to happen. Yes?

Mr. Worthington. I think we need to find ways to get the exact right piece of data from everything that VA and U.S. Department of Defense (DOD) have access to the person that needs it at the right time. I actually think that search-and-summarization capability is actually one of the things that we are excited about AI may be being able to help with.

Mr. Luttrell. This is what AI will do for us.

Mr. Worthington. I think it could help with those sorts of things to sift through all——

Mr. LUTTRELL. I do not think the human brain could process that many data sets.

Mr. WORTHINGTON. That is right. This is one of the areas we are actively investing in.

Mr. LUTTRELL. I should not say that. The human brain could absolutely do anything; the human being cannot.

Mr. WORTHINGTON. I think it gives an opportunity to empower people to act on more information than they would be able to do manually.

Mr. LUTTRELL. That is something that—the kind of downstream I would like to—you know, I would like to see the—how we are laying this out. At the end of the day, as appropriators, in Congress, we are going to have to put a dollar sign on that. Since Electronic Health Record (EHR) is really giving us a great time, you kind of see where I am going with this?

Thank you, Mr. Chairman. I yield back.

Mr. BARRETT. Yes. Thank you, Mr. Luttrell.

I will recognize myself for 5 minutes.

Mr. Ghatak, you mentioned in your testimony, kind of compared AI to the early days of the railroad, right? You know, this was a great advancement, but it was fraught with all these problems and challenges, and, you know, over time was perfected—and I guess never truly perfected, but certainly perfected to the degree that we can reasonably get to.

I think when it comes to artificial intelligence, there is a greater risk than the occupants of a train rolling down a railroad track. This could have catastrophic outcome if left, you know, unguarded or breach of information or, you know, who knows what. It could

be truly problematic.

What are the guardrails that you think are appropriate and necessary right now to make sure that that does not happen with AI? Like how are we going to look over the horizon of what could hap-

pen and prevent it from happening on the front end?

Mr. Ghatak. Thank you. It is a great question. I think it is a very—it is sort of a fundamental question in terms of AI and what it is and what it is not. As I said in my statement, when you interact with AI tools today, it feels like you are talking to a human being, but it is not a human being. It has no moral conscience. It does not really understand the words that is actually being given to it or the words that it is producing.

There are a number of ways to really address this issue. One of those is really understanding the difference between correlation

and causation without getting into great statistical detail.

There is nearly a perfect correlation—as I put in my testimony—in terms of the number of Google searches for the word "Nintendo" and the number of librarians in the State of Michigan. Most statistical models will rely on this relation—since I am using correlation—to identify patterns and then reproduce those patterns in its output. What is really needed is an emphasis on causation, understanding the inputs that a model uses, how those inputs relate to each other, and how those relate to the outputs.

There is very little effort being placed on that type of technology and that type of investment because the dollars are already chasing correlation. Correlation is a lot easier to do than causation.

That is where a lot of the investment goes.

I would say one of fundamental areas is—and I do not know if it can be mandated, but I would think—I would hope that the scientific and research community would realize that is the power of AI, is to unlock the true potential of it, is to really mimic how a human mind works, which is it sees something and reacts to it, and then produces something else. To mimic that with other technology would be great.

The other thing that I did want to say is going back to the data itself. A model is trained. I think the question was around bias, right? The data that the model is given, if it is not inherently debiased, if a lot of thought is not given to the data itself that the model receives, then the output will be inherently biased. It could be biased because of the way it is engineered. It could be biased because of the data that it is given. Because these models are so complex and so little work has been done to understand how they

work, we will never know if it is the model that is biased or the data that was biased.

Again, a principle, a development principle, a research principle, a standardization that is adopted by industry to address all of

those would be very helpful.

Mr. Barrett. Yes, thank you. That correlation-causation thing is really important. I would bet or guess that a lot of information at the beginning is correlation information. Over time, maybe it can be perfected or improved into the causative and non-causative, you know, parts of that. At the beginning, it is "if this, then that" correlation. We may not know why or how, but these things, especially when you are dealing with medical information over a long period of time, and, you know, if enough people come in with a correlating condition, enough times we begin to believe it is causative for a risk factor for something else.

I guess how do we—like how do we make good decisions based on that? You know, because we may not even understand the causative nature of it, but if it is enough correlation data there, maybe

it does tell us something.

Mr. Ghatak. Absolutely. I think correlation has a purpose in terms of identifying patterns or identifying things that are outside of the norm, absolutely. It is a wonderful tool, and it is a critical tool. My position would be that it just cannot be used in a vacuum. That coupled with understanding causation and investing more in those types of tools to help understand the true relations between these things and why one is causing the other.

As I mentioned, there is no obvious relationship between Google searches and the number of librarians. The problem is correlation

models do not know that.

Mr. Barrett. Right.
Mr. Ghatak. They just Google that number and run with it. There are a lot of crazy examples that I can give, but that is a good one and relevant. That emphasis on causation I think is really one that has not been invested in as much as it should be. It is something that we found that is really helpful and powerful that helps us understand our models and why they came that way. Also, when they fail, we understand why they fail. It is likely because something broke in that relationship or did not work in that relationship.

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

I am going to yield to Ranking Member Budzinski for 5 minutes.

Ms. BUDZINSKI. Thank you. Thank you, Mr. Chairman.

I wanted to ask Ms. Harris some follow-up questions. Just as ranking member, I have spent now a lot of time asking the VA how it plans to juggle all of these different numerous modernization efforts the Department is pursuing, like Electronic Health Record Modernization (EHRM), of course, supply chain, HR modernization, and now AI.

I was wondering if you could speak to the types of resources that the VA will need to consider having at its disposal as it deploys these systems.

Ms. HARRIS. Yes, thank you for the question. I mean, first and foremost, I think it is hugely problematic that VA does not have a permanent CIO in place. I know you mentioned it in your open-

ing statement. That is because, under his or her leadership, that is where these, you know, various IT modernizations get prioritized, you know. Plus our work has shown that, you know, when you have that steady leadership over, you know, 3-to 4-year time period, that is essential for any successful major IT initiative, including all the AI initiatives, Zero Trust, EHRM, all those things.

The second point, OIT is obviously going through a major restructuring right now. They have requested almost \$300 million less in Fiscal Year 2026 than the previous year. They have also re-

duced staff by 931 staff.

Now more than ever, VA needs to fully understand—have the comprehensive grasp on the skills and inventories that they have in their IT workforce, and at this time, they do not know that. They are not in a position to effectively assess what they need if they do not know what they have. That is an open recommendation that we have. That is first and foremost something that they need

to do in order to answer your question.

Ms. Budzinski. Okay. Thank you.

Mr. Worthington, in GAO's review from July, VA noted that it faced challenges with implementing generative AI use cases due to a lack of sufficient technical resources and budget. Your testimony highlights this issue of cost as well.

As it is currently funded and staffed, do you believe the VA is capable of implementing additional AI-use cases on top of these

other modernization efforts that I have mentioned.

Mr. Worthington. Thank you for the question, Ranking Member. I do think that we have the resources to implement high-impact AI, but it is a tough environment. Everything is competing for resources with each other. It is a matter of prioritizing those things that are going to have the most amount of veteran impact with the resources that we have.

Ms. Budzinski. Okay. I guess I just go back to what Ms. Harris' recommendation, getting a CIO I think is really critical to helping to prioritize all of these different really important initiatives.

Mr. Worthington, do you believe the VA's challenges with retaining AI experts and other technical employees may impact VA's abil-

ity to scale AI tools and other modernization efforts?

Mr. WORTHINGTON. I definitely think having AI experts on the VA side will help make us a better purchaser of these solutions, and it is an important thing for us to do. We have invested a lot in trying to build this team, especially through partnerships with things like the United States Digital Corps and the Presidential Innovation Fellows Program. You want to lean into those sorts of partnerships to help us bring AI experts in, in addition to those that we can recruit ourselves.

Ms. Budzinski. Okay. Great. Mr. Worthington, we are hearing reports of VA's ambient listening pilot will be rolled out across ten facilities by the end of this year. What is the Department determining a success for this pilot?

Mr. WORTHINGTON. Thank you for the question. I will let Dr.

Carey give you some details on that.

Dr. Carey. Thank you for the question. We have established a series of criteria and evaluation as we roll this out that is focused on user acceptance testing, veterans' perceptions of the tool as its used in their ongoing trust, and the care they receive, and just overall performance of the tool. We will continue to monitor that during the pilot.

Ms. Budzinski. Okay. Are you measuring clinician burden, and

what are your targets?

Dr. CAREY. We are—I can take that for the record to get back to you with the specifics. In general, we are measuring clinician burden and getting clinician feedback both synchronously and

through survey mechanisms to understand the impacts.

Mr. Worthington. One thing I would love to add is the users of our generative AI tool that is deployed to the workforce as a whole, in a survey, 73 percent of the users of that tool reported that they were able to spend more time fully using their professional skills, and 68 percent reported increased job satisfaction. I do think that these tools are going to be value adds to our workforce to help them do more to serve veterans.

Ms. BUDŽINSKI. Well, it seems to me that we are placing a massive burden on providers. That is a concern. From being an ambassador to the tool for veterans, ensuring the tools' accuracy, and then reporting and mediating issues as they arise, how is the Department working to be proactive about receiving feedback from

providers on issues with this tool?

Dr. Carey. Thank you. That is a great question. Just briefly, I want to recognize, it is so important to balance that survey response burden and burden on the clinicians that are also providing care. We have been partnering with clinicians on day one, designing this as they are the end users. We just have ongoing conversations with them about the best way to balance those competing things.

Ms. Budzinski. Okay. Thank you. I yield back.

Mr. BARRETT. Thank you. I will—we are going to close here mo-

mentarily. I just have one quick question.

On that listening and automation transcribing, is that file of that recording, is that deleted after it is transcribed? Is there some protection there to make sure that it is not archived or held someplace?

Mr. WORTHINGTON. We do have procedures on that and would be happy to get that back to you for the record. I do not have the details in front of me, but, yes, we have got that accounted for.

Mr. BARRETT. Thank you. I will now yield to Ranking Member

Budzinski for her closing statement.

Ms. Budzinski. Okay. Thank you. I just want to thank the panelists for being here today to have this conversation. I do very much

appreciate it.

I do want to go back, though, Mr. Worthington, to a conversation we had earlier about the six VA employees that had been working with DOGE and a letter that Ranking Member Takano had written to the VA back in June. We have not gotten a response. We just want similar transparency around access to the data that those six employees had. That is veterans' data. I just want transparency and some additional information on that.

Anything you can do to help us get a response back for Ranking Member Takano would be very appreciated. Thank you.

Mr. BARRETT. Thank you, Ranking Member Budzinski. I appreciate it.

I want to thank our panelists and the members today for joining us for this important hearing. This hearing has made clear that VA has both made a tremendous—we have had both a tremendous opportunity as well as a serious responsibility when it comes do using artificial intelligence within the VA.

VA has access to some of the best data and research assets in the world. I know Mr. Luttrell pointed that out in some of the

questioning too.

If used the right way, AI could help doctors detect cancer earlier, prevent heart disease, cut down on paperwork, and, most importantly, save veterans' lives and hopefully prevent veteran suicides in the process.

Programs like REACH Vet show us it is possible when technology is focused on the mission, and we can improve outcomes. Let us be clear, AI is a tool, not a replacement for doctors, nurses, and care teams. I appreciate the VA stipulating that we are not trying to replace practitioners with AI tools.

It can help identify risks earlier and provide clinical pathways, but it cannot and must not replace treatment or human judgment. That is the reason we send doctors to college, right, because we

want them to be experts on what they are doing.

Veterans deserve both cutting-edge technology and a strong medical team working together on their behalf. That means vigilance and self-responsibility—and a sense of responsibility are still required. If VA fails to safeguard veterans' data or to maintain transparency, trust will be lost, and progress is going to stall.

This subcommittee will continue to hold the VA accountable to ensure that AI enhances care, reduces red tape, and strengthens—

not substitutes—the human touch needed in medicine.

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

Without objection, that is so ordered, and this hearing is adjourned.

[Whereupon, at 4:23 p.m., the subcommittee was adjourned.]

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Prepared Statements of Witnesses

Prepared Statement of Charles Worthington

Chairman Barrett, Ranking Member Budzinski, and distinguished Members of the Subcommittee, thank you for the opportunity to testify regarding VA's opportunity to use Artificial Intelligence (AI) to improve health care and services to Veterans. Your longstanding support of Veterans and their families is greatly appreciated. I am accompanied today by Dr. Evan Carey, Acting Director of the National Artificial Intelligence Institute, Digital Health Office, Veterans Health Administra-

While the use of AI at VA is not new, recent advances in the capabilities of AI systems represent a significant opportunity for VA. Many of the most time-consuming tasks VA employees and Veterans must now complete manually could, in the future, be made dramatically faster and more accurate when assisted by effective AI-enabled software. VA, in partnership with industry, academia, and other Federal agencies, is working rapidly to seize this opportunity.

VA's strategic vision is to make the Department an industry leader in AI that im-

vAs strategic vision is to make the Department an industry leader in Al that improves Veterans' lives by delivering faster, higher quality, and more cost-efficient services, with strong governance and trust.

We have distilled this strategy into five execution priorities: (1) expanding AI access across the VA workforce; (2) reimagining high-impact workflows with AI and automation; (3) ensuring the most promising AI projects receive prioritized investment; (4) building an AI-ready workforce; and (5) running transparent and effective AI governance.

To realize this strategy, VA is increasingly investing in AI-driven tools that enhance productivity, reduce manual burden, and improve service delivery to Veterans. In VA's 2024 inventory, we reported 227 AI use cases, representing nearly 100 more use cases than in the 2023 report. We expect this increase to continue

in our 2025 report.

These investments are yielding tangible results. In one highly anticipated use case, VA now offers an on-network generative AI tool known as VA GPT. Over 85,000 users are engaged with the tool which assists with basic administrative tasks such as drafting emails and summarizing documents and meetings notes. A survey of VA GPT users found that the tool saves its users an average of 2.5 hours per

week, with more than 80 percent agreeing that it has made them more efficient. Furthermore, we have successfully piloted and scaled an AI-assisted software development tool called GitHub Copilot, now used by over 2,000 developers within OIT and our contract partners. These software developers indicate this AI-assisted software development tool is helping them deliver capabilities faster and saving them over 8 hours a week. This includes faster development of Veteran-facing features on VA.gov, making it easier to refill prescriptions and apply for benefits, and the im-

provement of backend systems that accelerate claims processing.

Al-augmented tools are also driving improvements in clinical care, with 82 percent of the over 200 use cases in VA's inventory coming from the Veterans Health Administration (VHA). VA's Stratification Tool for Opioid Risk Mitigation (STORM) uses machine learning to identify and mitigate the risk of overdose and suicide among Veterans prescribed opioids or with opioid use disorder. By summarizing patient risk factors, STORM identifies high risk Veterans for review by expert health teams. Health care teams reviewed the care of over 28,700 Veterans identified by STORM in the past year alone, decreasing mortality in high-risk patients by 22 percent. Since its launch in 2017, the REACH VET program has used tools like STORM to identify and bring clinical attention to nearly 135,500 Veterans, improve outpatient care, reduce suicide attempts, and decrease the number of mental health emergencies.

Additionally, VHA has deployed 84 AI-assisted devices that have been authorized by the, including one that uses computer vision to enhance clinical outcomes such as early tumor detection. One VA study showed that using AI-assisted colonoscopy devices increased adenoma detection rates by 21 percent, which is associated with

lower late-stage cancer incidence and reduced mortality.

VA is committed to implementing innovative, AI-powered tools that advance health care for Veterans, improve the experience of care teams, and optimize VA's workforce. As part of this commitment, VA will pilot ambient scribe technology at 10 sites beginning this fall. Ambient scribe is an AI technology that listens to and documents the conversations between health care providers and patients. AI processes a transcript of the encounter to generate secondary outputs like clinical encounter notes and coding recommendations. It has the potential to transform health care by reducing clinician burdens, enhancing efficacy, improving patient care quality and experience, and engaging with clinical decision support services. Ultimately, it allows the provider to spend more time face-to-face with Veterans.

As we progress, protecting Veterans' data privacy while responsibly leveraging AI's potential is a top priority for the Department. Like all software approved for use at VA, AI systems must meet VA's rigorous security and privacy standards before they receive an Authority to Operate. Additionally, consistent with the Office of Management and Budget memorandum M-25-21, our team is facilitating an agency-level review of each AI use case to ensure the tool meets the Government's standards for innovation, governance, and public trust. Each use case undergoes an AI Impact Assessment to identify and mitigate risks.

Further, VA has established and is committed to maintaining an annual AI use case inventory. First released in December 2024, we are on track to provide an update to this inventory in December 2025. This inventory positions VA among the

most transparent health care systems in the country regarding AI.

Looking ahead, our focus over the next 12 months will be implementing our strategic execution priorities by expanding employee access to generative AI to 100 percent of VA staff, reimagining high-impact workflows, prioritizing investment strategy to high return-on-investment AI solutions, releasing new AI training opportunities for employees, and maintaining transparent and effective AI governance by ensuring 100 percent of VA's high-impact AI use cases meet the Administration's standards.

Despite our industry-leading progress, VA acknowledges the adoption of AI tools presents significant challenges. Among them is integrating new AI solutions within VA's highly complex existing system architecture, and as a Government entity entrusted with Veterans' private information, balancing adoption of new and emerging tools and vendors with the Government's strict security compliance standards is crucial. Retention of AI experts is a challenge. Finally, scaling commercial AI tools will incur additional costs, making it an ongoing effort to align these costs with available technology funding. Cost is one of many reasons the Department encourages Congress to fully fund VA next year in lieu of another continuing resolution.

In conclusion, VA remains steadfast in its commitment to harnessing the power of AI to improve the lives of Veterans. By strategically investing in AI tools and enhancing our workforce's capabilities, we aim to deliver faster, higher quality, and more cost-efficient services. While we acknowledge the complexities and challenges inherent in this transformation, we are dedicated to maintaining the highest standards of governance, transparency, and ethical use of AI. With your continued support, we can ensure that VA leads in AI innovation and sets a benchmark for responsible AI use in public service. Thank you for the opportunity to testify before

you today. I look forward to your questions.

Prepared Statement of Sid Ghatak

Chairman Barrett and distinguished Members of the Subcommittee:

Thank you for the opportunity to testify. My name is Sid Ghatak, and for almost three decades, I have designed and deployed artificial intelligence and forecasting systems across finance, healthcare, pharmaceuticals, media, and government.

I currently serve as the Chief Technical Advisor for the National Artificial Intelligence Association, the premier organization representing over 1,500 businesses in the advancement of AI, and am also the founder and Chief Executive Officer of Increase Alpha, LLC, where we use artificial intelligence to predict stock prices and license these predictions to hedge funds.

In the Federal Government, I served in the General Services Administration for almost 4 years, where I was a Director of the Data & Analytics Center of Excellence. In that role, I co-authored the Federal AI Maturity Model 3 years before AI took the world by storm and contributed to previous Executive Orders on AI, specifically

on the critical issues of data security and privacy.

At Increase Alpha, I architected a predictive AI model that generates alpha once thought impossible—a deep learning system exceptionally accurate at predicting equity prices. Increase Alpha far exceeds multiple industry benchmarks, including accuracy, Sharpe ratio, and alpha generation. This solution is not based on Large Language Models but is a purpose-built predictive engine designed for a very specific need.

I want to emphasize that it is entirely unrelated to the Department of Veterans Affairs and has no bearing on today's testimony. I mention it only as an example of how AI, when carefully designed with a clear purpose, can achieve exceptional effectiveness.

Taken together, this diverse background—spanning academia, government, and industry—has given me the rare opportunity to actually build AI systems that work well in the real world. Because I have spent my career outside the orthodox worlds of academia, venture capital, and big tech, I am also not beholden to herd mentality. Instead, I bring an expert, independent perspective which is especially valuable now, when much of the world is caught up in the 'art of the possible' with AI, when what is most urgently needed is a sober understanding of what is safe, practical,

and ready to serve the public.

LLMs like ChatGPT, Claude, and Gemini are a powerful subset of AI, but they come with their own set of problems, specifically in healthcare, where hallucinations and sycophancy on the part of chatbots can lead susceptible users down psychological rabbit holes. Which is why it's important to clarify that AI is bigger than just ChatGPT and its competitors.

To use an applicant the steam engine transformed society fueling the Industrial

To use an analogy: the steam engine transformed society, fueling the Industrial Revolution. While steam power still exists today, it gave way to other forms of power over time. Until steam engines were used to create the first railroads, no human had ever traveled faster than a horse. This new form of transportation opened the world's eyes to what was possible, just as ChatGPT has shown the world the art of the possible with AI. But early train travel was dangerously unreliable. Accidents were frequent, derailments common, and thousands of lives were lost before rail systems matured into the safe networks we know today.

The lesson is clear: revolutionary technologies will evolve and improve over time when the private sector and government work in collaboration. The same applies to AI.

As the Committee gathers information on how to modernize technology at the VA, I would like to offer three pieces of advice from my decades at the front lines of building and implementing advanced analytical solutions:

1. Expand the playing field: For the last several years, the world has been consumed with Large Language Models to the point where AI has become synonymous with it; however, that is not the case. Many other types of AI may have similarities to these models, but function very differently. Technologies that specialize in interpreting and understanding images, video, and audio, for example. Or technologies that are better suited to working with numbers and symbols instead of words. And new tech that has yet to be invented.

There is an old adage that when you are a hammer, everything looks like a nail. The world has become so enamored with LLMs, and rightfully so. Interacting with them can feel magical, giving you the sense that they are real people, though they are not. This may be why little to no investment is being made into these other areas.

At Increase Alpha, we have demonstrated clearly what can be done with other forms of Artificial Intelligence. I began building our models at the same time as the research underlying ChatGPT was published. I had also encountered the same compute, cost, energy, and reliance on Nvidia GPUs issues we still see today. I also took a different approach to conserve resources and focus on simplification using Predictive Intelligence, which led to lean AI models that use a minuscule amount of data compared to LLMs, and which are small enough to run on a cell phone.

Over 4 years, the success of my models directly contradicts the notion that massive amounts of data—along with their associated infrastructural and operational costs—are needed to build AI solutions that are extremely accurate, innovative, and reliable. Not to mention that they also consume ever-increasing amounts of energy and utilize models that produce outputs that are often incomprehensible and unexplainable. I have proven, in one of the most competitive and challenging tech arenas, that modern AI does not require all this if it is designed correctly from the outset. The Administration, in its recent AI Action Plan, does not limit AI to the narrow definition of LLM and provides support for numerous types of technologies to be developed.

2. **Correlation is not Causation**: The difference between correlation and causation is best understood through an example. There is a near-perfect correlation between the number of Google searches for the word 'Nintendo' and the number of librarians in Michigan. It doesn't take a rocket scientist to understand that there is no actual relationship between the two trends.

Why is this so important? Because AI solutions today, such as ChatGPT, are based on correlations, even if those correlations are nonsensical. It is why they hallucinate (make up answers based on nothing), and why they have an inherent bias. While they give the impression of understanding and reasoning through their rapid generation of coherent text, they have no idea what the words themselves actually mean. They excel at predicting the next best word based on a vast network of correlations and are even better at providing the user with the answer they want to hear, even if it's not accurate.

To achieve true artificial intelligence, these systems would also have to know why the next word was predicted, which cannot currently be explained. They would need to know the truth behind every output. This is causation. That is how the human mind works. Until AI systems can understand and explain the 'why' of their inner workings and outputs, and become reliable sources of truth, they will never be truly intelligent. I remain hopeful that I will experience this in my lifetime, but it has not happened yet, nor is it likely to happen soon.

3. **Data, Data**: AI is an engine that requires data. But not just any data. Accurate, functional AI systems that produce explainable and auditable outputs require vetted and cleaned data, which we feel 100 percent confident using. By some estimates, the Federal Government has more data than any other organization in the world.

As a former Federal employee, I had the opportunity to work on projects that required this type of clean data to achieve their envisioned solutions. What I saw firsthand was the same thing I had seen in every other large organization. There was always more data than anyone realized. No one really knew where all of it was located or what it meant, and the sheer effort to gather, clean, and organize that data for proper use would have been enormous and cost-prohibitive.

This is one of the key reasons many AI and data analytics projects fail. Unless an organization is willing to make the investments in organizing and cleaning their data, these solutions—to put it bluntly—will be like lipstick on a pig. They will not work over the long run, and even when they do, they will not be reliable because they are not explainable.

We can see this already in current versions of Large Language Models, which are aptly named because they are built on unfathomably large amounts of language data. Some of it is factually correct. Some of it is factually wrong. Some of it has good intentions. Some of it is prejudiced, with built-in hate, discrimination, and the bias of their very human authors. As the old saying goes, garbage in, garbage out.

What does this all mean for the VA and the well-being and care of our veterans? I can't claim to know. No one does. But I want to leave you with a prediction of my own. I believe we truly are on the verge of a revolution on the scale of the Industrial Revolution. So, if I could leave you with one idea today, it would be this: AI is actually much bigger than today's LLMs. And it is these technologies, many of which have yet to be invented, that will enable the VA to execute its mission "To fulfill President Lincoln's promise to care for those who have served in our Nation's military and for their families, caregivers, and survivors."

In light of this, the Committee's work is vitally important to ensure that the investments the Federal Government makes into AI solutions will actually fulfill its mission. Our Veterans have given their bodies, minds, and very lives so that we all can enjoy ours, and we owe them more than our thanks and gratitude. We owe them the help and services they need when and how they need them.

I am privileged to be here today, amongst my esteemed colleagues, and I look forward to answering your questions. Thank you for this opportunity.

Prepared Statement of Mohammad Ghassemi

House Committee on Veterans' Affairs, Subcommittee on Technology Modernization

Hearing on Advancing VA Care Through Artificial Intell

Congressional Testimony: Advancing Care Through Artificial Intelligence
Dr. Mohammad Ghassemi, Assistant Professor, Computer Science, Michigan State University
September 8th, 2025

Introduction to myself, and the scope of my testimony:

Dear Chairman, Ranking Member, and Members of the Subcommittee, thank you for the opportunity to contribute to the House Committee on Veterans' Affairs, Subcommittee on Technology Modernization's hearing on Advancing VA Care Through Artificial Intelligence (AI). I am a scientist and entrepreneur focused on AI, with a special interest in its applications to healthcare. While the views I share in this testimony are completely my own, they are also informed by the professional experiences I have accumulated over the years. For this reason, I will begin this testimony with a brief introduction to my background to clarify where my expertise allows me to offer guidance, and where I'm less positioned to speak with authority.

I serve as a Professor of Computer Science at Michigan State University, where I direct the Human Augmentation and Artificial Intelligence Lab. My scholarly work over the last decade includes over 70 published scientific articles, a majority of which are related to Al for health 10201, I also served as a Data and Technology Advancement National Service Scholar at the National Institutes of Health (NIH), where I collaborated with multi-institution consortia on how Al can accelerate the pace and impact of health research nationally.

I am also the founding partner of Ghamut Corporation, a boutique Al consulting firm I established nearly 10 years ago with the mission of bringing cutting edge Al technologies from "the bench, to the bedside". Through both my research and professional practice, I have partnered with organizations across the public, private, startup, and nonprofit sectors including the NIH, Pfizer, Bayer, the Gates Foundation, Henry Ford Health System, and the Massachusetts General Hospital, to name a few.

It is from this combination of academic and professional practice that I draw the perspective I share with the Subcommittee herein. At the same time, I want to emphasize that I am not a veterans' health specialist. My guidance will therefore focus on the potential of AI to advance core healthcare values (values that are naturally relevant to veterans' care) while leaving veteran-specific operational considerations to those with more direct expertise.

The guiding framework for the suggestions provided herein:

In its invitation, the Subcommittee identified three objectives motivating its interest in AI: (i) transforming healthcare delivery, (ii) streamlining services, and (iii) improving outcomes. My testimony focuses on how AI can help realize these objectives through three complementary mechanisms: Automation (to reduce low-value work), Augmentation (to strengthen clinical decisionmaking), and Insights (to extract evidence from complex data). In the remainder of this testimony, I will take each objective, outline key problems that prevent its realization, and present concrete examples of how AI (through automation, augmentation, and insights) can help address them, supported by evidence from peer-reviewed studies and, where relevant, my own research.

Objective 1 - Transformation of Healthcare Delivery:

Al can improve what happens in the clinical encounter itself.

- 1.1 Automation Less paperwork, more patient time. Problem: Clinicians spend too much time on administrative tasks (e.g. note taking). Al solution: Ambient Al scribes can passively listen to the visit, draft the notes, and upload them into the medical record. Evidence: A randomized trial found that doctors using Al scribes spent much less time on paperwork and finished notes faster; other studies reported visits felt smoother and doctors could focus more on patients (Mafi et al., 2025; Stults et al., 2025).
- 1.2 Augmentation Faster and safer triage. Problem: In busy emergency departments, critically ill patients are sometimes missed or delayed because triage decisions must be made quickly with limited information. Al solution: Decision-support tools can help clinicians identify high-acuity patients earlier and cut the time from arrival to treatment. Evidence: A multi-site study showed Al helped nurses prioritize the sickest patients and cut time to treatment; results were best when nurses and Al worked together (Taylor et al., 2025;).
- 1.3 Insights Detecting early deterioration during care. Problem: Patients can decline rapidly (for example, developing sepsis), and traditional monitoring often picks it up too late. Al solution: Early-warning systems trained on real-time clinical data can alert clinicians to subtle signs of decline hours before they become obvious. Evidence: Hospitals using an Al sepsis warning system gave antibiotics faster and saw better survival rates; experts noted benefits depend on strong clinical adoption (Adams et al., 2022, Kennedy & Rudd, 2022).

Why it matters: By reducing paperwork, improving triage, and detecting decline sooner, AI can make bedside care safer, timelier, and more patient-centered.

Objective 2 - Streamlining healthcare services:

Al can make the "plumbing" of healthcare run more smoothly (everything around the visit itself).

- 2.1 Automation Reducing no-shows through reminders. Problem: Missed appointments waste scarce clinical time, and delay care for others. Al solution: Automated text reminders and rescheduling systems can reduce no-shows. Evidence: Adding an extra Al-targeted text message cut missed visits by up to 11%, and reviews showed that text reminders consistently boosted attendance across systems (Simon et al., 2022: Wang et al., 2024).
- 2.2 Augmentation Care coordination and referrals. Problem: Patients often face fragmented handoffs between primary care and specialists. Al solution: Augmentation tools can recommend optimal referral targets, flag missing information, and track whether referrals are completed. Evidence: D Digital "eConsult" programs cut specialty wait times and reduced unnecessary in-person visits (; ; Seven et al., 2024; Peeters et al. 2024).
- 2.3 Insights Ensuring follow-up on incidental fundings. Problem: Patients sometimes receive unexpected findings on imaging or labs (for example, a lung nodule seen on a CT done for another reason). Too often, these findings are not tracked, leading to delayed or missed treatment. Al solution: Al-driven tracking systems and process-mining tools can monitor incidental findings, flag needed follow-ups, and ensure accountability across teams. Evidence:

Hospitals using Al-linked registries tracked lung nodules more reliably; this led to more patients being diagnosed at an earlier, treatable stage of cancer (Dver et al., 2021; Carr et al., 2022).

Why it matters: More reliable scheduling, referrals, and follow-up mean patients spend less time waiting and are less likely to have critical findings overlooked.

Objective 3 - Improving Patient Outcomes:

Al can enable a level of care personalization beyond the reach of clinicians alone.

- 3.1 Automation Keeping chronic care on track. Problem: Patients with chronic diseases (such as diabetes or heart failure) often miss medications, labs, or follow-up visits, which accelerates disease progression. Al solution: Automated systems can track patient data across records and pharmacies, trigger reminders, and escalate when care gaps persist. Evidence: A Systematic review reported that text messaging interventions can reduce cardiovascular disease risk by improving medication adherence and reduce blood pressure (Martinez et al, 2025).
- 3.2 Insights Targeted outreach for high-risk patients. Problem: Many patients at high risk for serious events (such as overdose, suicide, or readmission) are not identified in time for preventive action. Al solution: Predictive analytics applied to population-level health data can flag these patients for proactive outreach. Evidence: A clinical trial found that an Al tool spotting patients at risk of opioid misuse cut hospital readmissions nearly in half and saved costs (Afshar et al. 2025)
- 3.3 Augmentation Guiding life-or-death decisions at the bedside. Problem: In critical care, prognosis is uncertain, and misjudgments can lead to premature withdrawal of care or misplaced resources. Al solution: Advanced models can provide time-sensitive predictions to support prognosis and guide decision-making. Evidence: My team's work showed Al analysis of brain-wave data more accurately predicts who will recover after cardiac arrest, helping avoid ending treatment too soon and focusing resources where recovery is possible (Ghassemi et al., 2019).

Why it matters: From everyday chronic disease management to critical care decisions, AI can personalize medicine in ways that extend lives, reduce suffering, and enhance long-term well-being

Conclusions

Artificial intelligence is not a silver bullet, but the evidence shows it can already help with the Subcommittee's three objectives: transforming care delivery by giving clinicians back time at the bedside, streamlining services by reducing waste and missed opportunities, and improving outcomes by personalizing care beyond what any individual can track. The common thread is that Al succeeds when it reduces low-value work, strengthens (not replaces) clinical judgment, and turns complex data into actionable insight. Realizing these benefits requires disciplined pilots, clear success metrics, and strong guardrails for safety, equity, and privacy. If deployed with these principles, Al can return time from paperwork to patients, ensure that critical findings are not missed, and support life-or-death decisions with better evidence: delivering care that is more efficient, more responsive, and more humane for veterans. Thank you for the opportunity to testify.

Disclosures:

An Al tool was used only for minor copy editing tasks within this document, including punctuation, spelling, and small grammar corrections; the substantive content was written entirely by the author.

Bibliography:

- Adams, R., et al. "Prospective, multi-site study of patient outcomes after implementation of the TREWS machine learning-based early warning system for sepsis." Nature Medicine, 2022; https://pubmed.ncbi.nlm.nih.gov/35864252/
- Afshar, M., et al. "Clinical implementation of Al-based screening for risk for opioid use disorder in hospitalized adults." *Nature Medicine*, 2025: https://www.nature.com/articles/s41591-025-03603-z
- Carr, L. L., et al. "Improvement in Stage of Lung Cancer Diagnosis With Incidental Pulmonary Nodules Followed With a Patient Tracking System and Computerized Registry." JTO Clinical Research Reports, 2022. https://pmc.ncbi.nlm.nih.gov/articles/PMC8924678/.
- Dyer, D. S., et al. "Improvement in Follow-up Imaging With a Patient Tracking System and Computerized Registry for Lung Nodule Management." *J Am Coll Radiol*, 2021. https://pubmed.ncbi.nlm.nih.gov/33607066/.
- Eichstaedt, J., et al. "Efficacy of a voice-based conversational AI solution to support basal insulin titration in adults with type 2 diabetes: randomized clinical trial." NPJ Digital Medicine, 2023. (Overview via JAMA Network page.) https://iamanetwork.com/journals/iamanetworkopen/fullarticle/2815236.
- Ghassemi, M. M., et al. "Quantitative EEG trends predict recovery in hypoxic-ischemic encephalopathy." *Critical Care Medicine*, 2019. https://pmc.ncbi.nlm.nih.gov/articles/PMC6746597/.
- Kennedy JN, Rudd KE. "A sepsis early warning system is associated with improved patient outcomes". Cell Rep Med. 2022. https://pmc.ncbi.nlm.nih.gov/articles/PMC9512693/
- Mafi, J. N., et al. "Randomized Clinical Trial of Two Ambient Al Scribes." MedRxiv Pre-print 2025. https://pmc.ncbi.nlm.nih.gov/articles/PMC12265753/.
- Peeters, K. MM, et al. "Family physician-to-hospital specialist electronic consultation and access to hospital care: A systematic review." *JAMA Network Open*, 2024: https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2813916
- Seven, N. A., et al. "Electronic consultations in a community neurology practice: A retrospective study informing best practice." Mayo Clinic Proceedings: Innovations, Quality & Outcomes 8.1, 2024: https://www.sciencedirect.com/science/article/pii/S2542454823000747
- Simon, G. E., et al. "Pragmatic Randomized Study of Targeted Text Message Reminders to Reduce Missed Clinic Visits." *The Permanente Journal*, 2022. https://pubmed.ncbi.nlm.nih.gov/35609163/

- Stults, C. D., et al. "Evaluation of an ambient artificial intelligence documentation platform for clinicians" *JAMA Network Open*, 2025. https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2833433
- Taylor, R. A., et al. "Impact of Al-Based Triage Decision Support on Emergency Department Care." NEJM AI, 2025. https://ai.nejm.org/doi/full/10.1056/Aloa2400296.
- Wang, Z., et al. "Effectiveness of text message reminders on paediatric appointment adherence: a systematic review and meta-analysis" Eur J Pediatr, 2024. https://pubmed.ncbi.nlm.nih.gov/39279016/
- Calderon Martinez, E., et al. "Text messages as a tool to improve cardiovascular disease risk factors control: a systematic review and meta-analysis of randomized clinical trials" BMC Public Health, 2025. https://doi.org/10.1186/s12889-025-21818-0

Prepared Statement of Carol Harris



United States Government Accountability Office

Testimony

Before the Subcommittee on Technology Modernization, Committee on Veterans' Affairs, House of Representatives

For Release on Delivery Expected at 3:00 p.m. ET Monday, September 15, 2025

VETERANS AFFAIRS

Key Al Practices Could Help Address Challenges

Statement of Carol Harris, Director, Information Technology and Cybersecurity



Veterans Affairs

Key Al Practices Could Help Address Challenges

Governance at the Organizational Level

GAO-25-108739

September 2025

A testimony before the Subcommittee on Technology Modernization, Committee on Veterans' Affairs, House of Representatives For more information, contact: Carol Harris at harriscc@gao.gov.

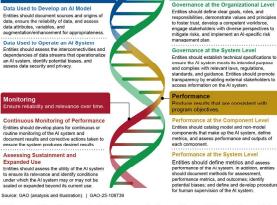
What GAO Found

Generative artificial intelligence (AI) systems create outputs using algorithms, which are often trained on text and images obtained from the internet. Technological advancements in the underlying systems and architecture, combined with the open availability of AI tools to the public, have led to widespread use.

The Department of Veterans Affairs (VA) increased its number of AI use cases between 2023 and 2024. VA has also identified challenges in using Al-such as difficulty complying with federal policies and guidance, having sufficient technical resources and budget, acquiring generative AI tools, hiring and developing an AI workforce, and securing sensitive data.

GAO has identified a framework of key practices to help ensure accountability and responsible AI use by federal agencies-including VA-in the design, development, deployment, and continuous monitoring of AI systems. VA and other agencies can use this framework as they consider, select, and implement Al systems (see figure).

Figure: GAO's Artificial Intelligence (Al) Accountability Framework



VA's use of the AI accountability framework along with a solid foundation of IT management and AI use cases could enable the department to better position itself to support ongoing and future work involving the technology.

Why GAO Did This Study

Developments in generative Al-which can create text, images, audio, video, and other content when prompted by a user—have revolutionized how the technology can be used in many industries, including healthcare, and at federal agencies including VA.

Al is a transformative technology for government operations, but it also poses unique challenges because the source of information used by AI systems may not always be clear or accurate. These challenges may be difficult for federal agencies including VA to overcome.

In prior reports, GAO found that VA has experienced longstanding challenges in managing its IT projects and programs. This raises questions about the efficiency and effectiveness of its operations and its ability to deliver intended outcomes needed to help advance the department's mission

GAO's statement describes (1) VA's AI use and challenges, and (2) principles and key practices for federal agencies that are considering implementing Al.

GAO summarized a prior report that described VA's use of Al. GAO also summarized key practices for federal agencies and other entities that are considering implementing Al systems.

What GAO Recommends

The prior GAO reports described in this statement include 26 recommendations to VA concerning management of its IT resources that have not yet been implemented, and one recommendation to update its Al inventory that has not been implemented.

Chairman Barrett, Ranking Member Budzinski, and Members of the Subcommittee:

Thank you for the opportunity to discuss the use of artificial intelligence (Al) at the Department of Veterans Affairs (VA). Developments in generative Al—which can create text, images, audio, video, and other content when prompted by a user—have revolutionized how the technology can be used in many industries, including the healthcare industry, and at federal agencies including VA. Al can increase risk for agencies, however, and poses unique oversight challenges because the source of information used by Al is not always clear or accurate. Given the fast pace at which Al is evolving, the government must be proactive in understanding its complexities, risks, and societal consequences.

VA has experienced longstanding challenges in managing its IT projects and programs, raising questions about the efficiency and effectiveness of its operations and its ability to deliver intended capabilities. In 2015, we added Managing Risks and Improving VA Health Care to our High-Risk List because of system-wide challenges, including with major modernization initiatives. 1 We also added VA Acquisition Management to our High-Risk List in 2019 due to, among other things, challenges with managing its acquisition workforce and inadequate strategies and policies. 2 Both remain high-risk areas.

For this testimony statement, I will describe (1) VA's AI use and challenges, and (2) principles and key practices for federal agencies—including VA—that are considering and implementing AI systems.

In developing this testimony, we summarized a prior GAO report that described VA's use of AI. We also summarized key practices developed by GAO for federal agencies and other entities that are considering and implementing AI systems. Detailed information on the objectives, scope, and methodology of the summarized work can be found in each issued report

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

¹GAO, High-Risk Series: An Update, GAO-15-290 (Washington, D.C.: Feb. 11, 2015).

²GAO, High-Risk Series: Substantial Efforts Needed to Achieve Greater Progress on High-Risk Areas, GAO-19-157SP (Washington, D.C., Mar. 6, 2019).

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

Al involves computing systems that "learn" how to improve their performance; it is a rapidly growing technology with applications found in every aspect of modern life. Al is used in day-to-day technologies such as video games, web searching, facial recognition technology, spam filtering, and voice recognition.

Al is a transformative technology with applications ranging from medical diagnostics and precision agriculture to advanced manufacturing and autonomous transportation, to national security and defense.³ It also holds substantial promise for improving the operations of government agencies.

Al capabilities are evolving and neither the scientific community nor industry agree on a common definition for these technologies. Even within the government, definitions vary. For example, according to the National Artificial Intelligence Initiative Act of 2020, Al is defined as a machine-based system that can, for a given set of human-defined objectives, make predictions, recommendations or decisions influencing real or virtual environments. ⁴ According to the National Institute of Standards and Technology (NIST) guidance, Al is "an engineered machine-based system that can, for a given set of objectives, generate outputs such as predictions, recommendations, or decisions influencing real or virtual environments. Al systems are designed to operate with varying levels of autonomy." ⁵

Generative AI is a subset of AI and other types of machine learning that can create novel content based on prompts from a user and patterns learned from datasets. Generative AI systems create outputs using algorithms, which are often trained on text and images obtained from the

⁵National Institute of Standards and Technology (NIST), *Artificial Intelligence Risk Management Framework*, NIST AI 100-1 (Gaithersburg, MD: January 2023).

³Office of Science and Technology Policy (OSTP), Exec. Office of the President, American Artificial Intelligence Initiative: Year One Annual Report, (Feb. 2020).

⁴National Artificial Intelligence Initiative Act of 2020, Division E of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021, Pub. L. No. 116-283, Div. E, § 5002(3), 134 Stat. 3388, 4524 (2021).(codified in relevant part at 15 U.S.C. § 9401(3)).

internet. Technological advancements in the underlying systems and architectures since 2017, combined with the open availability of AI tools to the public starting in late 2022, have led to widespread use. The technology is continuously evolving, with rapidly emerging capabilities that could revolutionize entire industries. As we previously reported, generative AI could offer agencies benefits in summarizing information, enabling automation, and improving productivity.⁶

However, despite continued growth in capabilities, generative AI systems are not cognitive, lack human judgment, and may pose numerous risks. In July 2024, NIST published a document defining risks that are novel to or exacerbated by generative AI.7 For example, NIST stated that generative AI can cause data privacy risks due to unauthorized use, disclosure, or de-anonymization of biometric, health, or other personally identifiable information or sensitive data.

Federal Guidance for Al and Generative Al

Federal agencies' efforts to implement AI are guided by federal law, executive actions, and federal guidance. Since 2019, various laws have been enacted, and executive orders (EO) and guidance have been issued to assist federal agencies in implementing AI. For example:

- In February 2019, the President issued EO 13859, establishing the American AI Initiative, which promoted AI research and development investment and coordination, among other things.⁸
- In December 2020, the President issued EO 13960, promoting the
 use of trustworthy AI, which focused on operational AI and
 established a common set of principles for the design, development,
 acquisition, and use of AI in the federal government.⁹ It also

⁶GAO, Science & Tech Spotlight: Generative AI, GAO-23-106782 (Washington, D.C.: June 13, 2023).

⁷National Institute of Standards and Technology (NIST), *Artificial Intelligence Risk Management Framework: Generative Artificial Intelligence Profile*, NIST Al 600-1 (Gaithersburg, MD: July 2024)

⁸Exec. Order No. 13859, 84 Fed. Reg. 3967, Maintaining American Leadership in Artificial Intelligence (Feb. 11, 2019).

⁹Exec. Order No. 13960, 85 Fed. Reg. 78939, Promoting the Use of Trustworthy Artificial Intelligence in the Federal Covernment (Dec. 3, 2020)

established the foundational requirements for AI use case inventories. ¹⁰

- In December 2022, the Advancing American AI Act, among other things, codified various requirements for agencies' AI use case inventories." Later, the U.S. Chief Information Officers (CIO) Council updated related guidance on how to create and make public annual AI use case inventories.
- In January 2025, the President issued EO 14148 and EO 14179, which updated U.S. policy on AI and directed the development and submission of an AI action plan by July 22, 2025.¹³
- In April 2025, as directed by EO 14179, OMB issued M-25-21.¹⁴ This
 memorandum requires agencies to develop a policy for acceptable
 use of generative AI, among other AI requirements. In addition, OMB
 issued M-25-22.¹⁵ This memorandum provides guidance to agencies
 to improve their ability to acquire AI responsibly.

In addition to executive orders and OMB policy memorandums, agencies have published government-wide guidance for AI, and for generative AI specifically.

General Services Administration Al Guide for Government. This
guide is intended to help government decision-makers by offering

¹⁰According to the U.S. Chief Information Officers Council, an Al use case refers to the specific scenario in which Al is designed, developed, procured, or used to advance the execution of agencies' missions and their delivery of programs and services, enhance decision-making, or provide the public with a particular benefit

¹¹Advancing American AI Act, Pub. L. No.117-263 (James M. Inhofe National Defense Authorization Act for Fiscal Year 2023), div. G, title LXXII, subtitle B, §§ 7221-7228,136 Stat. 2395, 3668-3676 (2022) (40 U.S.C. § 11301 note).

¹²U.S. Chief Information Officers Council, *Guidance for Creating Agency Inventories of Al Use Cases Per EO 13960* (Washington, D.C.: 2023).

¹³Exec. Order No. 14148, 90 Fed. Reg. 8237, Initial Rescissions of Harmful Executive Orders and Actions (Jan. 20, 2025) and Exec. Order No. 14179, 90 Fed. Reg. 8741, Removing Barriers to American Leadership in Artificial Intelligence (Jan. 23, 2025). These EOs rescinded EO No. 14110; Exec. Order 14110, 88 Fed. Reg. 75191, Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence (Oct. 30, 2023).

¹⁴Exec. Order No. 14179; Office of Management and Budget (OMB), Accelerating Federal Use of Al through Innovation, Governance, and Public Trust, M-25-21 (Washington, D.C.: Apr. 3, 2025) (rescinding and replacing M-24-10).

¹⁵OMB, Driving Efficient Acquisition of Artificial Intelligence in Government, M-25-22 (Washington, D.C., Apr. 3, 2025) (rescinding and replacing M-24-18). clarity and guidance on defining AI and understanding its capabilities and limitations, and by explaining how agencies could apply it to their mission areas. ¹⁶ For example, the guide identifies key AI terminology and steps agencies could take to develop their AI workforce.

NIST Secure Software Development Practices for Generative AI and Dual-Use Foundation Models. This document expands on NIST's Secure Software Development Framework by incorporating practices for generative AI and other advanced general-purpose models. 17 It documents potential generative AI development risk factors and strategies to address them.

VA Has Historically Faced Challenges in Managing IT Resources

As we reported in December 2023, agencies must:

- prepare an AI use case inventory,
- plan for Al inventory updates,
- · make the AI use case inventory publicly available, and
- designate an official responsible for AI. 18

We further reported that VA had completed each of these four requirements. Specifically, VA had prepared and made public an AI use case inventory, developed a plan for inventory updates, and designated a responsible AI official. However, we noted that VA's inventory of AI use cases did not include required data elements that OMB requested for the inventory or provided incorrect elements. We recommended that VA ensure that the department updates its AI use case inventory to include all the required information, at a minimum, and takes steps to ensure that the data in the inventory aligns with provided instructions. Doing so is critical for the agency to have awareness of its AI capabilities and to make important decisions. Without an accurate inventory, the department's implementation, oversight, and management of AI could be

 $^{^{16}\}mbox{General}$ Services Administration, Al Guide for Government (Washington, D.C.: June 2022).

¹⁷ NIST, Secure Software Development Practices for Generative AI and Dual-Use Foundation Models, SP 800-218A (July 2024), providing generative AI-specific guidance in tandem with NIST, Secure Software Development Framework, SP 800-218 (Gaithersburg, MD: February 2022).

¹⁸GAO, Artificial Intelligence: Agencies Have Begun Implementation but Need to Complete Key Requirements, CAO-24-105980 (Washington, D.C.: Dec. 12, 2023).

based on faulty data. As of September 2025, the agency has not implemented the recommendation.

We have also issued multiple reports discussing VA challenges in modernizing IT systems and improving IT resource management. These include challenges, for example, with modernizing its health information and financial management systems, tracking software licenses, managing its cybersecurity workforce, and cloud computing. ¹⁹ We continue to monitor 26 prior recommendations that VA has not yet fully implemented related to the challenges we previously identified in managing its IT resources.

In addition, we recently testified about VA's fiscal year 2026 budget request, which reflects a range of planned reforms that will impact department priorities, staffing, and investments in IT.20 VA requested about \$7.3 billion to fund its IT systems in fiscal year 2026, about a 4 percent decrease from enacted budget levels in fiscal year 2025. VA's budget request states that a reduction of 931 full-time equivalents is consistent with maturing technology delivery models and a shift toward automation and digital services. In addition, VA's request reflects a range of planned reforms: investing over \$3.5 billion to hasten implementation of its electronic health record modernization; reducing IT expenditures by about \$500 million by retiring outdated legacy systems and pausing procurements to reassess IT initiatives; and streamlining administrative practices leading to about \$40 million in savings. Our testimony also noted GAO's prior work on leading practices that federal agencies—including VA—can consider when undertaking agency reform efforts,

²⁰GAO, Veterans Affairs: Leading Practices Can Help Achieve IT Reform Goals, GAO-25-108627 (Washington, D.C.: July 11, 2025).

¹⁹GAO, Electronic Health Records: VA Making Incremental Improvements in New System but Needs Updated Cost Estimate and Schedule, GAO-25-106874 (Washington, D.C.: Mar. 12, 2025); Electronic Health Records: VA Needs to Address Management Challenges with New System, GAO-23-106731 (Washington, D.C.: May 18, 2023); Veterans Affairs: Ongoing Financial Management System Modernization Program Would Benefit from Improved Cost and Schedule Estimating, GAO-21-227 (Washington, D.C.: Mar. 24, 2017); Federal Software Licenses: Agencies Need to Take Action to Achieve Additional Savings, GAO-24-105717 (Washington, D.C.: Jan. 29, 2024); Cybersecurity Workforce: Departments Need to Fully Implement Key Practices, GAO-25-106795 (Washington, D.C.: Jan. 16, 2025), and Cloud Computing: Agencies Need to Address Key OMB Procurement Requirements, GAO-24-106137 (Washington, D.C.: Sept. 10, 2024).

including efforts to streamline and improve the efficiency and effectiveness of IT operations.²¹

VA Has Reported Increased AI Use Cases, Challenges in Using and Managing AI, and Establishment of AI Policies and Practices

In July 2025, we reported that federal agencies—including VA—had increased their number of AI use cases between 2023 and 2024. We also reported that they had identified challenges in using and managing AI, and had established AI policies and practices.

VA Has Increased Use Cases for AI

In July 2025, we reported that selected agencies had generally increased the number of AI use cases between 2023 and 2024. ²² Regarding VA, the department reported 40 AI use cases in 2023, and 229 AI use cases in 2024. ²³ For example, VA is developing a generative AI use to automate various medical imaging processes.

This use may enhance VA's ability to analyze medical images, integrate existing and new data workflows, and create summary diagnostic reports. In the health and medical sector, agencies have adopted generative AI to advance research and improve public health outcomes, including at VA. As we have previously reported, AI technologies can assist in analyzing complex medical data, leading to more accurate diagnostics and personalized treatment plans. ²⁴ For example, AI models can summarize

²¹GAO, Government Reorganization: Key Questions to Assess Agency Reform Efforts, GAO-18-427 (Washington, D.C.: June 13, 2018).

²²GAO, Artificial Intelligence: Generative AI Use and Management at Federal Agencies, GAO-25-107653 (Washington, D.C.: July 29, 2025).

²³According to the U.S. Chief Information Officers Council, an AI use case refers to the specific scenario in which AI is designed, developed, procured, or used to advance the execution of agencies' missions and their delivery of programs and services, enhance decision-making, or provide the public with a particular benefit. Of these use cases, VA reported that 1 use case in 2023 was associated specifically with generative AI, and 27 use cases in 2024 were associated specifically with generative AI.

²⁴GAO, Science & Tech Spotlight: Generative AI in Health Care, GAO-24-107634 (Washington, D.C.: Sept. 9, 2024); Artificial Intelligence in Health Care: Benefits and Challenges of Machine Learning Technologies for Medical Diagnostics, GAO-22-104629 (Washington, D.C.: Sept. 29, 2022). patient electronic health records, medications, and chronic condition information to aid in clinical decision-making.

VA Has Experienced Challenges in Using and Managing Generative AI

In July 2025, we found that federal agencies including VA have reported that they face several challenges in using and managing generative Al. For instance:

Complying with existing federal policies and guidance. Agencies—including VA—are required to adhere to federal policy and guidance when using generative AI. However, VA officials shared that existing federal AI policy may not account for or could present obstacles to the adoption of generative AI including in the areas of cybersecurity, data privacy, and IT acquisitions. VA officials also noted that existing privacy policy can prohibit information sharing with other agencies, which can prevent effective collaboration on generative AI risks and advancements.

Having sufficient technical resources and budget. Generative AI can require infrastructure with significant computational and technical resources. Agencies—including VA—reported challenges in obtaining or accessing the needed technical resources. In addition, agencies—including VA—reported challenges related to having the funding needed to establish these resources and support desired generative AI initiatives.

Acquiring generative AI tools. VA officials reported experiencing delays in acquiring commercial generative AI products and services, including cloud-based services, because of the time needed to obtain Federal Risk and Authorization Management Program authorizations.²⁵ According to the literature we reviewed, these delays can be exacerbated when the provider is unfamiliar with federal procurement requirements.

Hiring and developing an AI workforce. Agencies—including VA—reported challenges in attracting and developing individuals with expertise in generative AI. These agencies can also be affected by competition with the private sector for similarly skilled professionals. Furthermore, these agencies reported difficulties in establishing and providing ongoing education and technical skill development for their current workforce.

²⁵We previously reported in GAO-24-106591 that the Office of Management and Budget established the Federal Risk and Authorization Management Program in 2011 to facilitate the adoption and use of cloud services. The program is intended to provide a standardized approach for selecting and authorizing the use of cloud services that meet federal security requirements

Securing sensitive data. Agencies are required to ensure that sensitive data used in the training and deployment of generative AI models are kept secure and compliant with federal requirements. However, officials at agencies—including VA—told us that strict data security requirements may prevent them from performing generative AI research in certain agency mission areas.

VA Is Establishing Policies and Practices to Help Address Generative AI Challenges Officials at VA told us they are working toward implementing the new AI requirements in OMB's April 2025 memorandum, M-25-21.²⁶ Doing so will provide opportunities to develop and publicly release AI strategies for identifying and removing barriers and addressing challenges previously cited. These strategies are to include, among other things, plans to address infrastructure and workforce needs, processes to facilitate AI investment or procurement, and plans to ensure access to quality data for AI and data traceability. In addition, the memorandum (1) encourages agencies to promote the trust of AI systems and (2) directs agencies to develop a generative AI policy that establishes safeguards and oversight

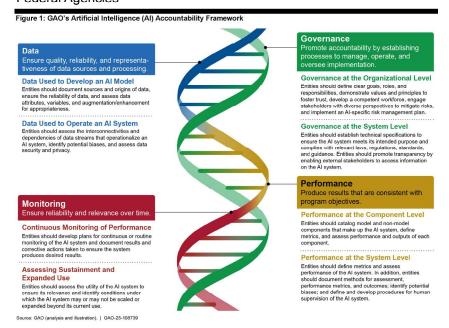
As the AI policy landscape evolves, agencies—including VA—are developing and updating their own guidance intended to govern their use and management of generative AI. These policies and practices can help address generative AI challenges previously described. For example, VA and other agencies have developed the following policies and practices to mitigate challenges with the use and management of generative AI:

- Appropriate use. While many of the selected agencies reported challenges with maintaining appropriate use, VA reported that it has established specific guidelines on the appropriate use of AI and provided training to staff on the protection, dissemination, and disposition of federal information while using generative AI.
- Data security. VA has taken action to safeguard sensitive data.
 Specifically, it prohibits employee use of web-based, publicly available generative AI services with sensitive data.

²⁶OMB, Accelerating Federal Use of Al through Innovation, Governance, and Public Trust, M-25-21 (Washington, D.C.: Apr. 3, 2025).

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GAO Has Developed a Framework for Ensuring AI Accountability at Federal Agencies GAO has identified a framework of key practices to help ensure accountability and responsible AI use by federal agencies in the design, development, deployment, and continuous monitoring of AI systems. ²⁷ VA and other agencies can use this framework as they consider, select, and implement systems. Figure 1 presents the framework organized around four complementary principles that address governance, data, performance, and monitoring.



²⁷GAO, Artificial Intelligence: An Accountability Framework for Federal Agencies and Other Entities, GAO-21-519SP (Washington, D.C.: June 30, 2021).

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Governance

To help entities promote accountability and responsible use of AI systems, GAO identified nine key practices for establishing governance structures and processes to manage, operate, and oversee the implementation of these systems. The governance principle is grouped in two categories:

- Governance at the organizational level, which helps entities ensure oversight and accountability and manage risks of AI systems.
 Managers should establish and maintain an environment throughout the entity that sets a positive attitude toward internal controls.
- Governance at the system level, which helps entities ensure Al systems meet performance requirements.

Examples of key practices within the categories include:28

- Clear goals: Define clear goals and objectives for the AI system to ensure intended outcomes are achieved.
- Workforce: Recruit, develop, and retain personnel with multidisciplinary skills and experiences in design, development, deployment, assessment, and monitoring of AI systems.
- Specifications: Establish and document technical specifications to ensure the AI system meets its intended purpose.

Data

Data used to train, test, and validate AI systems should be of sufficient quality and appropriate for the intended purpose to ensure the system produces consistent and accurate results. To help entities use data that are appropriate for the intended use of each AI system, GAO identified eight key practices to ensure data are of high quality, reliable, and representative. The data principle is grouped in two categories:

- Data used for model development: This category refers to training data used in developing a probabilistic component, such as a machine learning model for use in an AI system, as well as data sets used to test and validate the model.
- Data used for system operations: This category refers to the various data streams that have been integrated into the operation of an AI system, which may include multiple models.

 $^{^{\}rm 28}{\rm The~governance~principle}$ includes six key practices in the first category and three key practices in the second category.

Examples of key practices within the categories include:29

- Sources: Document sources and origins of data used to develop the models underpinning the AI system.
- Dependency: Assess interconnectivities and dependencies of data streams that operationalize the AI system.
- Bias: Assess reliability, quality, and representativeness of all the data used in the system's operation, including any potential biases, inequities, and other societal concerns associated with the AI system's data.

Performance

To help entities ensure AI systems produce results that are consistent with program objectives, GAO developed nine key practices for the performance principle, grouped in two categories:

- Component level: Performance assessment at the component level determines whether each component meets its defined objective. The components are technology assets that represent building blocks of an AI system. They include hardware and software that apply mathematical algorithms to data.³⁰
- System level: Performance assessment of the system determines whether the components work well as an integrated whole.

Examples of key practices within the categories include:31

- Documentation: Catalog model and non-model components, along with operating specifications and parameters.
- Assessment: Assess performance against defined metrics to ensure the AI system functions as intended and is sufficiently robust.

²⁹The data principle includes five key practices in the first category and three key practices in the second category.

³⁰In addition to standard computer hardware such as central processing units, an AI system may include additional hardware such as graphic processing units or assets in which the AI is embedded, as in the case of advanced robots and autonomous cars. Software in an AI system is a set of programs designed to enable a computer to perform a particular task or series of tasks.

³¹The performance principle includes four key practices in the first category and five key practices in the second category.

Monitoring

To help entities ensure reliability and relevance of AI systems over time, GAO identified five key practices grouped in two categories for the monitoring principle for assessing sustainment and expanded use.

- Continuous monitoring of performance: This category involves tracking inputs of data, outputs generated from predictive models, and performance parameters to determine whether the results are as expected.
- Assessing sustainment and expanded use: This category involves
 examining the utility of the AI system, especially when applicable
 laws, programmatic objectives, and the operational environment may
 change over time. In some cases, entities may consider scaling the
 use of the AI system (across geographic locations, for example) or
 expanding its use in different operational settings.

Examples of key practices within the categories include:32

- Planning: Develop plans for continuous or routine monitoring of the AI system to ensure it performs as intended.
- Ongoing assessment: Assess the utility of the AI system to ensure its relevance to the current context.

In summary, AI is a transformative technology for government functions and healthcare operations. However, it also poses unique IT oversight challenges for agencies, including VA, because the data used by AI are not always visible. Our prior recommendations on IT management and considering leading practices for effective reform are critical as VA continues to transform its oversight of IT across the department. If VA implements these recommendations effectively, it will be better positioned to overcome its longstanding challenges in managing its IT resources and will improve its ability to address the rapidly changing AI landscape. Federal guidance has focused on ensuring that AI is responsible, equitable, traceable, reliable, and governable. Consideration of the elements in the key practices described above can help VA guide the performance of assessments and audits of agency AI implementation.

 $^{^{\}rm 32}{\rm The}$ monitoring principle includes three key practices in the first category and two key practices in the second category.

Chairman Barrett, Ranking Member Budzinski, and Members of the Subcommittee, this concludes my prepared statement. I would be happy to answer any questions that you may have at this time.

GAO Contact and Staff Acknowledgments

If you or your staff have any questions about this testimony, please contact Carol C. Harris at harriscc@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this statement.

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