STATEMENT OF CHARLES WORTHINGTON, CHIEF TECHNOLOGY OFFICER, CHIEF ARTIFICIAL INTELLIGENCE OFFICER, OFFICE OF INFORMATION AND TECHNOLOGY DEPARTMENT OF VETERANS AFFAIRS BEFORE THE COMMITTEE ON VETERANS' AFFAIRS SUBCOMMITTEE ON HEALTH U.S. HOUSE OF REPRESENTATIVES

"Artificial Intelligence at VA: Exploring its Current State and Future Possibilities"

FEBRUARY 15, 2024

Good Morning, Chairwoman Miller-Meeks, Ranking Member Brownley, and distinguished Members of the Subcommittee. Thank you for the opportunity to testify about Department of Veterans Affairs (VA) exploration of current and future possibilities of Artificial Intelligence (AI). My name is Charles Worthington, and I am the Chief Technology Officer and Chief Artificial Intelligence Officer in VA's Office of Information and Technology. I am accompanied by Dr. Carolyn Clancy, Assistant Under Secretary for Health, Veterans Health Administration (VHA), and Dr. Gil Alterovitz, Director, VA National AI Institute (NAII) and VHA's Chief AI Officer.

VA is committed to protecting beneficiaries' data while responsibly harnessing the promise of AI to better serve Veterans. While AI can be a powerful tool, we must adopt it with proper controls, oversight, and security. VA is taking a measured approach as we begin to scale AI solutions to ensure we are adopting these powerful tools safely and in a manner that aligns with VA's mission. Adopted in July 2023, VA's Trustworthy AI framework outlines six principles to ensure AI tools are: purposeful, effective and safe, secure and private, fair and equitable, transparent and explainable, and accountable and monitored. This framework aligns with various AI executive orders, Office of Management and Budget memoranda, other Federal guidance, and VAspecific regulations and policies. VA has created the foundational guardrails it needs when considering AI tools that have significant potential to improve Veterans' health care and benefits.

VA Is a Federal Leader in Artificial Intelligence

As one of the pioneering Federal agencies to adopt a national AI strategy, VA has a head start on developing policies and procedures to govern the use of AI in production. VA seeks to align these policies with broader Federal guidelines and requirements covering privacy and data protection, ethical use of AI, interoperability and standards, procurement and acquisition, and research and development, VA will ensure consistency and accountability when we implement AI technologies while also safeguarding the security, privacy, and well-being of Veterans. This clarity on our expectations will be critical for entities in the private sector who are creating much of the AI technology VA and other Government agencies seek to use.

VA has long been a leader in health care research and at the forefront of technology, leading the way in various innovations such as the development of the first

electronic medical record, early adoption of telehealth, 3-D printing, and more. To support VA's adoption of AI in the health care setting, VA has established the NAII AI Network, a collaborative effort among field-based AI centers pioneered by Dr. Alterovitz and his colleagues in VHA. The network brings together data scientists and clinicians to enable translational AI research and development, accelerate the application of AI in health care operations, and test AI quality control systems. The current locations of the network include Washington, DC, Long Beach, California, Kansas City, Missouri, and Tampa, Florida.

VA's Data Security and Privacy Safeguards

VA has a robust privacy policy for information technology (IT) contracts that explicitly controls how others may use VA data. When a vendor needs access to VA data to perform its services, its handling of the information is limited to the strict confines of the contract, and the vendor is prohibited from using or disclosing the data for any other purpose. If vendors violate any of the information confidentiality, privacy, and security provisions of an IT contract or non-disclosure agreement, their penalties can include contract termination, withholding payments, additional Federal Acquisition Regulation remedies and measures, and Health Insurance Portability and Accountability Act of 1996 sanctions. Additionally, any serious misuse of data will be referred to the VA Office of Inspector General, the Department of Justice, law enforcement, and other oversight bodies for civil investigation and criminal prosecution.

VA's Current Efforts in Artificial Intelligence

As reported in the VA 2023 Agency Inventory of AI use cases, VA has tracked over 100 AI use cases. Forty of those cases are in an operational phase, and examples of the cases span from speech recognition for clinical dictation to computer vision for assisting with endoscopies and customer feedback sentiment analysis modeling.

Some highlights of our efforts so far include the following:

- VA is incorporating AI technology into Veterans' health care to enhance diagnostic accuracy and efficiency, and to predict cancer risks and adverse outcomes. This includes using predictive analytics for early and personalized interventions, streamlining administrative tasks, and accurately identifying appropriate health care providers for care.
- VA's Recovery Engagement and Coordination for Health Veterans Enhanced Treatment (REACH-VET) initiative uses AI to identify Veterans enrolled in VA care with the highest level of suicide risk. Since its inception in 2017, the initiative has successfully identified over 117,000 at-risk Veterans. VA evaluation of the REACH-VET indicates that the clinical program has been associated with increased attendance at outpatient appointments and proportion of individuals with new safety plans, reductions in mental health admissions, emergency department visits, and suicide attempts.
- VA launched the suicide prevention initiative, Mission Daybreak Grand Challenge in 2022. Among the winners was ReflexAI, an AI-powered training simulation in which crisis responders at the Veterans Crisis Line can build and practice skills to improve their ability to provide response to Veterans in crisis. The VA Office of

Mental Health Suicide Prevention is collaborating with Oak Ridge National Laboratories in the Department of Energy to develop new models that enhance REACH-VET by incorporating community data and geospatial data. The goals are to enhance the precision of predicting Veterans at highest risk of suicide, reduce bias, and enhance equity in vulnerable populations.

- The VA Stratification Tool for Opioid Risk Mitigation (commonly referred to as STORM) is a clinical decision support tool that uses predictive models to assist in identifying patients who require targeted monitoring and intervention for adverse outcomes.
- The Food and Drug Administration-authorized GI Genius system has been successfully deployed in 106 facilities for over 100,000 colonoscopies. Its primary purpose is to enhance the detection of precancerous polyps in the colon in realtime during a colonoscopy. VA has invested approximately \$19 million in purchasing GI Genius over the past few years, with the goal of completing deployment by this fall.

VA has also recently launched the "AI Tech Sprint", a requirement of Executive Order 14110, Executive Order on Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence. This sprint has two tracks focusing on how VA could use AI to address provider burnout by streamlining administrative tasks such as clinical note taking and the processing of paper medical records. VA has allocated nearly \$1 million for contract and software license costs to facilitate the AI Tech Sprint and plans to offer \$1 million in prize money for participants in the sprint.

These are just a few examples of the AI projects and initiatives currently underway within VA. By investing in these projects, VA aims to leverage AI technologies in the future to improve health care outcomes, enhance patient experiences, and optimize resource allocation for the benefit of Veterans.

Artificial Intelligence Is a Generational Shift in Technology

VA believes AI represents a generational shift in how our computer systems will work and what they will be capable of. If used well, AI has the potential to empower VA employees to provide better health care, faster benefits decisions, and more secure systems. Similar to other major transitions, such as cloud computing or the rise of smartphones, VA will need to invest in and adapt our technical portfolio to take advantage of this shift. With the strategies, policies, and programs already in place, VA will continue in its mission to protect the security and privacy of the data entrusted to us by the Veterans we serve.

Madam Chair, Ranking Member, and Members of the Subcommittee, thank you for the opportunity to testify before the Subcommittee to discuss this important topic. My colleagues and I are happy to respond to any questions that you have.