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BEFORE THE
SUBCOMMITTEE ON HEALTH
AND
SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS

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Good afternoon, Chairman Benishek, Chairman Coffman, Ranking Member Brownley, Ranking Member Kuster, and Members of the Subcommittees. Thank you for the opportunity to discuss the progress that the Department of Veterans Affairs (VA) is making towards modernizing our information technology (IT) infrastructure to better serve our VA business partners and our Nation's Veterans. We will also discuss scheduling, claims processing and adjudication, and medical record sharing initiatives at the Department. In order to successfully carry out those initiatives and our consolidation of community care programs, in addition to the legislative authorities and resources identified in our October 30, 2015 report to Congress, VA will need a digital health platform and IT solutions that will meet the evolving needs of our Veterans, as well as support our streamlined business processes. We are accompanied today by Dr. Alan Constantian, Deputy Chief Information Officer in the Office of Information Technology (OI&T).

New VA IT Strategic Plan

OI&T is at a critical inflection point. Persistent internal challenges exist in delivering IT services, and external pressures are compelling us to change and adapt. Through the MyVA initiative, VA is modernizing its culture, processes, and capabilities to put

Veterans first, and is giving our team the opportunity to make a real difference in Veterans' lives. This momentum is driving us to transform OI&T on behalf of our partners, our employees, and Veterans.

With this in mind, VA developed a new IT strategic plan. Our new vision is to become a world-class organization that collaborates with its business partners to provide a seamless, unified Veteran experience through the delivery of state-of-the-art technology. Our guiding principles are to be transparent, accountable, innovative, and team-oriented. To build trust, we are committed to measuring success, investing in the capabilities of our employees, and collaborating across VA.

We have created five new key functions to support VA's strategic objectives.

1. The *Account Management* function establishes a clear, consistent process for understanding and meeting the needs of our business partners and our customers.
2. The *Enterprise Program Management Office (EPMO)* function monitors key information to improve project execution and deliver better outcomes.
3. The *Data Management* function will ensure interoperability with our partners and protect Veteran data.
4. *The Strategic Sourcing* function will focus on knowledge sharing, best practices, and sharing insights on new technologies.
5. Finally, the *Quality and Compliance* function enables us to adhere to appropriate policies and standards to eliminate material weaknesses.

Building a strong team and ensuring that the mission continues past 2016 is vital to OI&T's transformation. IT is a field characterized by constant evolution. Veterans have earned the best care and benefits available which must be enabled by the best technological solutions and be empowered by the most skilled employee base. We must embrace creative staffing approaches and incentivize the best and brightest talent, both within and beyond the Federal government, to deliver world-class solutions.

However, talent management is not simply attracting the right people. It is retaining those with a passion and a commitment to our mission by fostering a compelling, rewarding environment. We are emphasizing our team's development as a key priority. The goals and milestones of our enterprise strategy will cascade throughout the team's performance plans at all levels. We are also customizing development and education programs, and by the end of 2017, VA will develop a meaningful employee career plan – a first in OI&T. Most importantly, we are leading talent development from the highest tiers of the OI&T team. We are evaluating our leadership approach to ensure that we have the right leaders in the right positions. We are infusing new perspectives and skills by hiring new talent. OI&T has added 5 senior leaders in critical roles and will add 11 more in the next 90 days. This team will realize our strategies and carry out our mission now and into the future.

This transformation will be different because we have the key components for success. Over three phases of implementation, OI&T will stabilize and streamline core processes and platforms, eliminate material weaknesses, and institutionalize a new set of capabilities to drive improved outcomes.

Enterprise Program Management Office

EPMO is building our momentum in OI&T's transformation. EPMO hosts our biggest IT programs, including the Veterans Health Information Systems and Technology Architecture (VistA) Evolution, Interoperability, the Veterans Benefits Management System, and Medical Appointment Scheduling System (MASS). EPMO also supports the Federal Information Technology Acquisition Reform Act requirements.
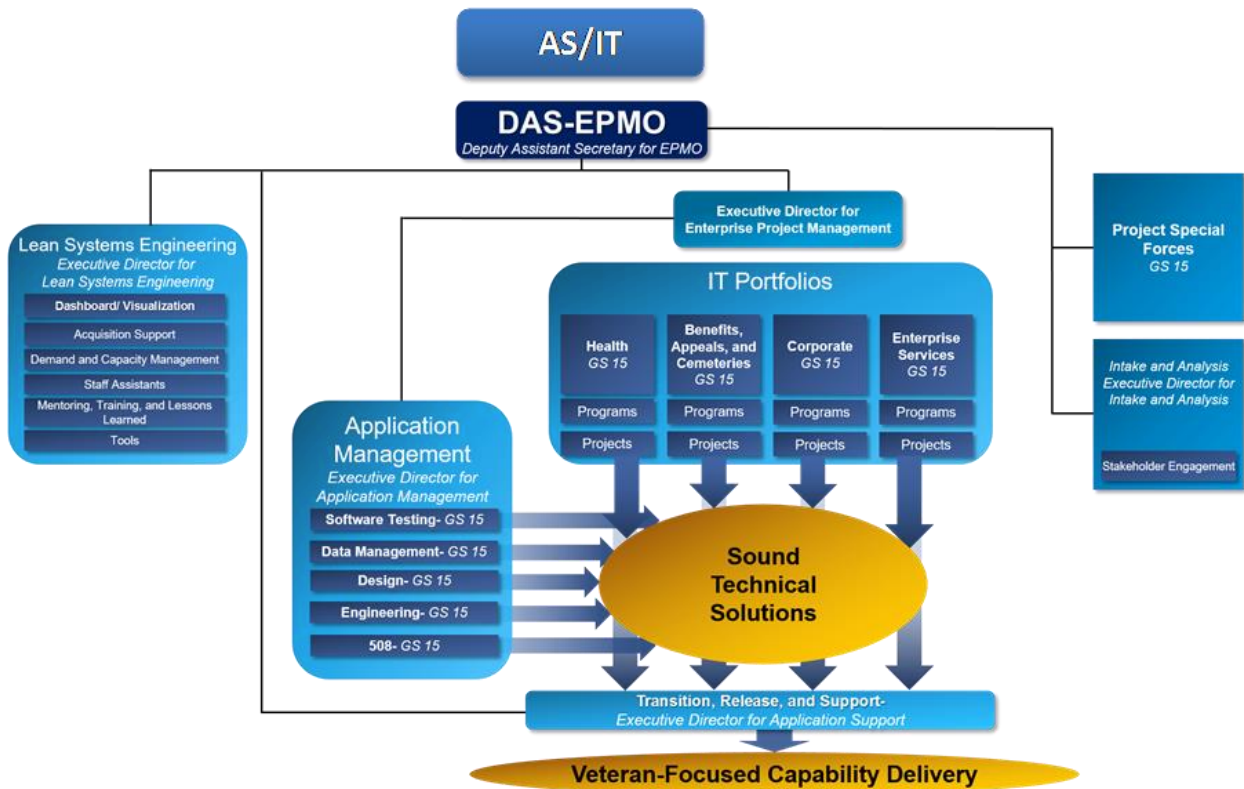
Fig. 1 – EPMO Organizational Chart

EPMO ensures alignment of program portfolios to strategic objectives and provides visibility and governance into the programs.

For enterprise initiatives, EPMO helps program and project teams to better develop execution plans, monitor progress, and report the status of these programs and projects. EPMO enables partnerships with IT architects for enterprise collaboration and serves as a program/project resource for the delivery of enterprise and cross-functional programs. This helps identify Shared Services Enterprise Programs and will help plan resource requirements with portfolios and architecture.

EPMO has already produced results. The Veteran-focused Integration Process (VIP) is a project-level based process that replaces the Program Management Accountability System (PMAS). VIP establishes a single release process with a predictable cadence that all VA organizations will follow by the end of 2016. It reduces overhead and

eliminates redundancy in review, approval, and communication processes. These efficiencies include reducing the review process from 10 independent groups with 90 people to a single group of 30 people focused on ensuring that products meet specified, consistent criteria for release.

VIP focuses on <u>doing</u> rather than <u>documenting</u>, with a reduction of artifacts from more than 50 to just seven, plus the Authority to Operate, and the shift from a 6-month to a 3-month delivery cycle. Further, as a guarantee to our work, EPMO will ensure that product teams stay assigned to their projects for at least 90 days after the final deployment.

<u>Enterprise Cybersecurity Strategy</u>

OI&T is facing the ever-growing cyber threat head on. The first step in our transformation was addressing enterprise cyber security. We delivered an actionable, far-reaching, cybersecurity strategy and implementation plan for VA to Congress on September 28, 2015, as promised.

OI&T is committed to protecting all Veteran information and VA data and limiting access to only those with the proper authority. This commitment requires us to think enterprise-wide about security holistically. We have dual responsibility to store and protect Veterans records, and our strategy addresses both privacy and security. We designed our strategy to counter the spectrum of threat profiles through a multi-layered, in-depth defense model enabled through five strategic goals.

- **Protecting Veteran Information and VA Data:** We are strongly committed to protecting data. Our data security approach emphasizes in-depth defense, with multiple layers of protection around all Veteran and VA data.
- **Defending VA's Cyberspace Ecosystem:** Providing secure and resilient VA information systems technology, business applications, publically accessible platforms, and shared data networks is central to VA's ability to defend VA's cyberspace ecosystem. Addressing technology needs and operations that

require protection, rapid response protocols, and efficient restoration techniques is core to effective defense.

- **Protecting VA Infrastructure and Assets:** Protecting VA infrastructure requires going beyond the VA-owned and VA-operated technology and systems within VA facilities to include the boundary environments that provide potential access and entry into VA by cyber adversaries.

- **Enabling Effective Operations:** Operating effectively within the cyber sphere requires improving governance and organizational alignment at enterprise, operational, and tactical levels (points of service interactions). This requires VA to integrate its cyberspace and security capabilities and outcomes within larger governance, business operation, and technology architecture frameworks.

- **Recruiting and Retaining a Talented Cybersecurity Workforce:** Strong cybersecurity requires building a workforce with talent in cybersecurity disciplines to implement and maintain the right processes, procedures, and tools.

VA's Enterprise Cybersecurity Strategy is a major step forward in VA's commitment to safeguarding Veteran information and VA data within a complex environment. The strategy establishes an ambitious yet carefully crafted approach to cybersecurity and privacy protections that enable VA to execute its mission of providing quality health care, benefits, and services to Veterans, while delivering on our promise to keep Veteran information and VA data safe and secure.

In addition, we have a large legacy issue that we need to address. VA is increasing our spending on security to $370 million, fully funding and fully resourcing our security capability for the first time. In addition, we are investing over $50 million to create a data-management backbone.

Scheduling

We recognize the urgent need for improvement in VA's appointment scheduling system. We are evaluating the Veteran Appointment Request (VAR) application and the VistA

Scheduling Enhancement (VSE) through simultaneous pilot programs. We are also testing VAR at 2 facilities and VSE at 10 locations.

VSE updates the legacy command line scheduling application with a modern graphical user interface. This capability reduces the time it takes schedulers to enter new appointments, and makes it easier to see provider availability. VSE provides critical, near-term enhancements, including a graphical user interface, aggregated facility views, profile scheduling grids, single queues for appointment requests, and resource management reporting.

Our VSE Initial Operational Capability (IOC) sites are:
- Charles George VA Medical Center in Asheville, NC
- West Palm Beach VA Medical Center in Florida
- Chillicothe VA Medical Center in Chillicothe, OH
- VA Hudson Valley Health Care System in New York
- Louis Stokes Cleveland VA Medical Center in Cleveland, OH
- VA New York Harbor Health Care System in New York
- VA Salt Lake City Health Care System in Utah
- VA Southern Arizona Health Care System in Tucson, AZ
- James H. Quillen VA Medical Center in Mountain Home, TN
- Washington, DC VA Medical Center in Washington, DC

VAR allows Veterans to request primary care and mental health appointments as face-to-face, telephone, or video visits by specifying three desired appointment dates. The software allows established primary care patients to schedule and cancel primary care appointments directly with their already-assigned Patient Aligned Care Team provider.

VA schedulers tell us that they need a system focused purely on scheduling. VSE and VAR pilots are available now and show positive results in meeting the business requirements of our partners. In contrast, MASS includes additional features that add

complexity, leading us to put MASS on a strategic hold while our VA team ensures that all requirements are met without undue processing difficulties.

VistA Evolution

VA is committed to the continued success of VistA, our electronic health record (EHR).

Current State of VistA Evolution

VistA Evolution is the joint VHA and OI&T program for improving the efficiency and quality of Veterans' health care by modernizing VA's health information systems, increasing data interoperability with the Department of Defense (DoD) and network care partners, and reducing the time it takes to deploy new health information management capabilities. We will complete the next iteration of the VistA Evolution Program—VistA 4—in fiscal year (FY) 2018, in accordance with the VistA Roadmap and VistA Lifecycle Cost Estimate. VistA 4 will bring improvements in efficiency and interoperability, and will continue VistA's award-winning legacy of providing a safe, efficient health care platform for providers and Veterans.

VA takes seriously its responsibility as a steward of taxpayer money. Our investments in VistA Evolution continue to make our Veterans' EHR system more capable and agile. VA has obligated approximately $510 million in development funds to build critical capabilities into VistA since FY 2014, when Congress first provided specific funding for the VistA Evolution program. VA has obligated $151 million in IT Sustainment funds and $110 million in VHA funds. The VHA funding supports the operational resources needed for requirements development, functional design, content generation, development, training, business process change, and evaluation of health IT systems.

It is important to note that VistA Evolution funding stretches beyond EHR modernization. VistA Evolution funds have enabled critical investments in systems and infrastructure, supporting interoperability, networking and infrastructure sustainment, continuation of legacy systems, and efforts—such as clinical terminology standardization—that are

critical to the maintenance and deployment of the existing and future modernized VistA. This work was critical to maintaining our operational capability for VistA. These investments will also deliver value for Veterans and VA providers regardless of whether our path forward is to continue with VistA, a shift to a commercial EHR platform as DoD is doing, or some combination of both.

Interoperability Certification

At VA, we know that a Veteran's complete health history is critical to providing seamless, high-quality care and benefits. Interoperability is the foundation of this capability as it enables clinicians to provide Veterans with the most effective care and makes relevant clinical data available at the point of care. Access to accurate Veteran information is one of our core responsibilities. The Department is happy to report that, thanks to a joint VA and DoD effort, we expect that interoperability will be certified with DoD, as defined by the 2014 National Defense Authorization Act, 8 months ahead of the end of the December 2016 deadline.

For front-line health care teams, the most exciting products from VistA Evolution are the Joint Legacy Viewer (JLV) and the Enterprise Health Management Platform (eHMP).

Joint Legacy Viewer

JLV is the basis for achieving interoperability. JLV is a clinical application that provides an integrated, chronological display of health data from VA, DoD, and community health care partners in a common data viewer. It provides a Veteran-centric view of the Veteran's health record rather than a facility-centric view. JLV's user base has outpaced our projections. As of March 27, 2016, JLV had 55,607 VA users, and is adding thousands of new users in VA and DoD every week. JLV also provides a near real-time view of DoD and VA health care data to benefits administrators, which facilitates the processing of Veterans' claims. All Veterans Benefits Administration offices have access to JLV and can use it to expedite claims.

Enterprise Health Management Platform

JLV has been instrumental in connecting the VA and DoD health systems, but it does have limitations. We must do more to achieve data interoperability. eHMP will expand JLV's capabilities. eHMP is a modern, secure, configurable web-based health information platform that will expand JLV's capabilities. eHMP is a major cornerstone of building VistA into a Generation 3 EHR, building on the capability for clinically actionable, patient-centric data pioneered by JLV. By August 2016, we will have a feed set up from VA to DoD through eHMP and the DoD Healthcare Medical System Modernization EHR. As the system matures, we will make it available to a broader base of clinicians. We will deploy eHMP with expanded capabilities in mid-2017. Clinicians will be able to write notes and order laboratory and radiology tests. During this deployment, eHMP will support tasking for team-based management and communication with improved communication and tracking. Instead of a static, "one-size-fits-all" desktop view, eHMP will allow clinicians to customize their workspaces to treat particular conditions more efficiently or best fit their clinical workflows.

Upon completion, eHMP will support the following capabilities:

- **Veteran-centric health care—**eHMP will allow clinicians to tailor care plans to specific clinical goals and help Veterans achieve their health care goals.

- **Team-based health care—**eHMP will provide an interoperable care plan in which clinical care team members, including the patient, will understand the goals of care and perform explicit tasks to execute the plan. eHMP will also monitor tasks that are not completed as specified and escalate them to the appropriate team.

- **Quality-driven health care—**eHMP will support the diffusion of best practices, including evidence-based clinical process standardization. eHMP will collect

data on how clinicians address conditions and power analytics to generate new evidence for better care and best practices.

- **Improved access to health information—**when fully deployed, eHMP will allow clinicians to input new data directly into the system. eHMP will integrate health data from VA, DoD, and community care partners into a customizable interface that provides a holistic view of each Veteran's health records.

Fundamentally, this is about data, not software. Regardless of the software platform, we need to be able to access the right data at the right time. Health data interoperability with DoD and network providers is important—but it is equally important to understand that this is just one aspect of having a comprehensive profile to streamline and unify the Veteran experience.

Using eHMP as a tool, health care teams will better understand Veterans' needs, coordinate care plans, and optimize care intensity in VA and throughout the high-performing network of care.

Looking to the Future

Modernization is a process, not an end, and the release of VistA 4 will not be the "end" of VA's EHR modernization. VistA 4 has always been scheduled to conclude in FY 2018, but there was always an intention to continue modernizing VA's EHR, beyond VistA 4, with more modern and flexible components.

Due to the expansion of care in the community, a rapidly growing number of women Veterans, and increased specialty care needs, the need for more agility in our EHR has never been greater. We are looking beyond what is delivered with VistA 4 in FY 2018, and we are evaluating options for the creation of a Digital Health Platform to ensure that we have the best strategic approach to modernizing our EHR for the next 25 years.

To prepare for this new era in connected health, VA is looking beyond the EHR to a digital health platform that can better support Veterans throughout the health continuum. These factors drive the need for continuous innovation and press us to plan further into the future.

Consolidation of Community Care

On October 30, 2015, VA provided Congress with a plan to consolidate all VA's purchased care programs. The plan included some aspects of the current Veterans Choice Program (VCP), established by section 101 of the Veteran's Choice Act, and incorporated additional elements designed to improve the underlying IT infrastructure and therefore, the delivery of community care. In this plan, VA identified several areas for needed IT solutions and improved IT infrastructure including care coordination, claims processing, and medical records management.

Care Coordination: Robust care coordination requires a strong health IT platform. VA's future health IT platform will perform the following functions: maintenance of care plans; a user-friendly interface for Veterans and caregivers to see their information; and accurate, timely information for providers. Patient-facing and telehealth technologies will allow Veterans to view their health data, care plan, and update their health and medical needs. Providers will use VA's medical records exchange to support health information transactions, and care teams will use the platform to support Veterans in their health care experience.

Claims Processing: VA will pursue simplified processes as it implements industry best practices. VA will focus on standardizing business rules and logic to support claims processing and improving interfaces and coordination with dependent systems (e.g., Eligibility). This solution will require a scalable, flexible claims platform that supports emerging, value-based care models and streamlines data maintenance, storage, and retrieval. This new claims solution will be integrated with Veteran Eligibility Systems, Authorization Systems, and standardized fee schedules to support auto adjudication.

Integration with fee schedules will support new payment models and enable better tracking and billing integration with other health insurance (OHI). VA will also integrate the claims processing system with patient information, increasing VA's ability to efficiently bill OHI.

Medical Records Management: As more Veterans receive care in the community, it is increasingly important to develop tools and solutions for easy access of health information between VA and community providers. To address this issue, VA will adopt a phased plan consistent with a systems approach to achieve a solution that is secure, efficient, effective, and standards based, using health information exchanges (HIEs). In the near-term, VA will focus on building upon current infrastructure to improve consistency, simplicity, and timeliness of information exchange. In the medium-term and long-term, VA plans to deploy a robust health information gateway and services, and share most clinical information through HIEs.

As described previously, we are further implementing the web-based JLV to offer a simple, complete, and easy-to-understand view of VA and DoD patient data. Second, VA plans to integrate existing exchange services to receive and store standards-based electronic documents, such as Continuity-of-Care Documents. This reduces the use of paper and builds on current VA investments. Third, VA plans to expand partnerships with HIEs and use direct secure email protocols. VA plans to continue to work with the critical Federal stakeholders to expand the usage of national standards for clinical terminology and data elements. As VA continues to evaluate the future solutions, VA will consider the needs of Veterans, community providers, and VA staff to ensure that any solution will support the future delivery of community care.

In the medium- and long-term, VA plans to create an electronic, secure, efficient, effective, and standards-based environment in compliance with relevant privacy laws affecting Veterans and their beneficiaries. VA plans to implement a health information gateway and associated services and share most clinical information through HIEs,

when available. Currently, HIEs reach 40 percent of U.S. hospitals and serve approximately one third of the U.S. population.[1]

Providers will be able to view, append, and share clinical and administrative information electronically through a VA health information gateway and associated services. Veteran clinical and administrative information will then be transferred back to VistA. VistA will incorporate an industry-leading information model, terminology normalization, knowledge enrichment, and search indexing for VA, Federal, and HIE partner sources. Available health information will drive enterprise-wide analytics efforts for process improvement.

Community Care IT Implementation Strategy

The New VCP will be implemented through a system of systems approach. A system-of-systems approach involves the design, deployment, and integration of meta-systems that are themselves composed of complex systems, which are integrated to deliver the desired functionality and end-to-end user experience.[2] Consistent with this approach, VA will begin by understanding the desired experience and required outcomes for Veterans, caregivers, VA staff, and community providers. VA will then examine all the components necessary to achieve the desired outcomes and understand how various component systems will integrate into the broader VA health care system and funding environment. To successfully implement this system-of-systems approach requires legislative changes, resources, and a budget.

Implementation of the system-of-systems approach will be executed through rapid cycle deployment using agile methodologies. This will allow VA to fix the most pressing issues with community care today, while making continuous updates to promote a learning health system that evolves with the needs of the Veteran population. This

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[1] The Sequoia Project—http://sequoiaproject.org/wp-content/uploads/2014/11/eHealth-Exchange-Overview-7-23-15.pdf
[2] Adapted from: Lia, P., Fisk, R. P., Falcão e Cunha, J., & Constantine, L. (2011). Multilevel service design: From customer value constellation to service experience blueprinting. Journal of Service Research, 14(2), 180–200.

approach enables VA to implement an integrated system design that allows people, processes, facilities, equipment, and organizations to deliver high-quality, high-value care.

Based on preliminary analysis of Veteran needs and the desired Veteran experience, VA has determined that the component systems of the New VCP are: 1) Integrated Customer Service Systems; 2) Integrated Care Coordination Systems; 3) Integrated Administrative Systems (Eligibility, Patient Referral, Authorization, and Billing and Reimbursement); 4) High-Performing Network Systems; and 5) Integrated Operations Systems (Enterprise Governance, Analytics, and Reporting).

In order to execute a program of this scope and scale, VA has outlined a transition plan consistent with the system-of-systems approach to sequence the design, development, and delivery of the New VCP. In developing the transition plan, VA considered recommendations from stakeholder feedback and the Independent Assessment Report. While the transition plan lays out a path forward for the program, the complexity of the change will require development of detailed implementation plans. In addition, any changes to the New VCP described in this plan, as a result of input from Congress or other stakeholders, will impact the activities described.

Transitions of this magnitude take years to design and implement; therefore, this plan is organized into three phases.

- Phase I can start immediately and will last 1 year, assuming available resources and required legislative and regulatory changes. This phase will focus on the development of minimum viable systems and processes that can meet critical Veteran needs without major changes to supporting technology or organizations.
- In Phase II, also lasting approximately 1 year, VA will enhance the changes implemented in Phase I through interfaced systems that will appear seamless to Veterans and community providers, but will largely continue to employ existing infrastructure and technology.

- Phase III will be a multi-year effort. In Phase III, VA will begin deploying an integrated system-of-systems approach that will support changes in Phases I and II and enable a seamless experience across VA and community care for all stakeholders. VA also will collect and analyze data on the progress and performance of the implementation to identify opportunities for continuous improvement.

Through all phases of the transition, VA will build a foundation for a health care system that can respond to the evolving needs of Veterans and the changing health care landscape at VA and in the community.

Phase I: Develop Implementation Plan and Implement Minimum Viable Solutions and Processes

During Phase I, VA has begun to develop an implementation plan that articulates a clear path forward for each system component across the three phases. This will include decisions about long-term system changes and outcomes of make/buy analyses for clinical and administrative technology solutions and network development. Phase I will also include the implementation of minimum viable systems and processes for the Veteran, community provider, and VA staff experience. These systems will focus on improvements that can be executed without major changes to organizations or technology.

Phase II: Implement Interfaced Systems and Process Changes

During Phase II, VA will implement interfaced systems and associated processes that will enable a seamless experience for Veterans and community providers. Interfaces will employ existing resources and technology infrastructure, but will appear integrated to end users. VA will need support from Congress to ensure that this implementation takes place. Simultaneously, VA will continue to develop fully integrated solutions that will be deployed in Phase III.

Phase III: Deploy Integrated Systems, Operate High-Performing Network, and Make Data-Driven Improvements

During Phase III, VA will begin to deploy integrated systems, including process and organization changes that will enable a seamless Veteran, community provider, and VA staff experience. These systems will build on changes in Phases I and II and will support collection of quality, value, and performance data for continuous improvements. Similar to Phase II, VA will rely on Congress to support Phase III.

Conclusion

VA is at a historic crossroad and will need to make bold reforms that will shape how we deliver IT services and health care in the future, as well as improve the experiences of Veterans, community providers, and VA staff. Throughout this transformation, our number one priority has and will always be the Veteran—ensuring a safe and secure environment for their information and improving their experience is our goal.

Additionally, to make these reforms, as we have discussed in a series of hearings on the October 30, 2015, Consolidation of Care report, VA will need short- and long-term assistance with legislative authorities and resources. Transformation of VA's community care program will address gaps in Veterans' access to health care in a simple, streamlined, and effective manner. This transformation will take into account the interdependent nature of external and internal factors involved in VA's health care system.

As with all issues, VA strongly values the input and support of all its stakeholders. We realize the vital role they play in assisting us in providing timely, high-quality care to Veterans, and we look forward to continued open dialogue.

This concludes our testimony, and we are prepared to answer any questions you or other Members of the Committee may have.