

Case study: US Department of Veterans Affairs (VA)

Connecting care for the country's largest health network

Veterans Health Administration (VHA) is the largest federal health system

As part of VA, VHA provides healthcare to nearly nine million veterans across 18 regional Veterans Integrated Service Networks, 171 medical centers, more than 1,000 Community Outpatient Centers and several hundred Veterans Centers, Mobile Vet Clinics, and Access Telehealth Local Area Stations locations.¹

Maintaining such a large and vital network comes with challenges, which were worsened by the pandemic

For many veterans – and potentially for our nation's service members– depression² and PTSD³ are prevalent. According to a 2020 Wounded Warrior Project survey conducted during the pandemic, 52% of veterans and service members experienced worsening mental health, while 51% had a mental health appointment canceled or postponed.⁴ Compounding the issue is access to care. Roughly five million veterans live in areas designated as rural by the US Census Bureau,⁵ making access to healthcare difficult. And as that population ages, the prevalence of chronic conditions is projected to rise. By 2060, the number of US adults with diabetes is projected to nearly triple from 39.7 million to 60.6 million.⁶ Difficulty in accessing care was exacerbated during the pandemic, when patients needed to receive care from home and when reduced rates of admission for heart attacks, strokes and other emergencies suggested that patients may have been avoiding necessary care out of a fear of going to the hospital.⁷ In 2020, there was a 56% decline in in-person visits across VA outpatient facilities, which was only partly offset by the twofold increase in the number of telephone and video visits.⁸

VA extended care via a virtual health solution

To combat these trends, enhance the experience of veterans, caregivers and survivors, and make healthcare as accessible and efficient as possible, VA utilized a virtual health solution that extended access to care, helped to coordinate team members and facilitated the secure and seamless flow of data across devices and locations.

Untethering patients from a centralized location

To make device- and setting-agnostic care possible, VA partnered with Philips prior to the pandemic to better understand VA's clinical needs, assess the existing level of interoperability, understand documentation requirements and, ultimately, provide the equipment for virtual care stations within Veterans of Foreign Wars and American Legion posts throughout the United States. With this virtual health solution in place, VA was prepared to respond and meet the needs of veterans throughout the pandemic.

This work, which aims to untether patients from a centralized location, is helping to address the growth of healthcare consumerism and in part fulfill the mandate of the MISSION Act, which stipulates that veterans can receive timely healthcare at either a VA facility or another general provider within the community. Such a mandate increases the need for interoperability of electronic health record (EHR) and diagnostic imaging data with the Department of Defense (DoD), private health networks and clinicians. If the patient is free to move, the data needs to be free to move as well.

Keeping patients healthier outside the hospital

This allows care to be delivered in more accessible and comfortable settings, such as the home, helping VA to improve the care experience, consistency of care and focus on preventative care to keep patients healthier outside the hospital. In the event patients move between care settings, VA can ensure that they are better served throughout their journey. Veterans' satisfaction with their care ultimately improved, due in part to the many components and data that work seamlessly together across time and place.⁹

Cybersecurity protects these evolving care connections

A tightly knit, cohesive virtual care system that makes data sharing easy is also a system that is easier to protect from online attack. To ensure data security, VA again partnered with Philips, working closely throughout the enterprise risk assessment (ERA) process and preparing to conduct the Federal Risk and Authorization Management Program (FedRAMP):

- Addressing potential material weakness in network-connected devices by identifying the inherited risk and impact
- Addressing system-specific security controls
- Managing and addressing vulnerabilities

And because of our commitment to interoperability, Philips technology, such as modular and extensible transport monitors, remote monitoring and defibrillator solutions and our web-based software platform, provides secure clinical decision support for emergency medical services (EMS) and military health personnel throughout the patient journey – from the field to transport to bedside – ensuring uninterrupted care.

Leveraging interoperability to make telehealth possible for veterans



18+ million

people cared for by VA and the DoD's Military Health System, making these two of the nation's largest and most complex health systems^{1,10}



million

veterans enrolled in the VA healthcare system, including three million living in rural areas¹¹



2.5+ million

VA video telehealth visits facilitated in 2019, a record for VA¹²



1000% increase

in VA video telehealth visits during the first weeks of the COVID-19 pandemic¹³

Integrating systems to increase access to care in rural areas and tribal lands

Like many veterans, American Indians and Alaska Natives face challenges getting access to the healthcare they need. Healthcare needs to be delivered in tribal lands and in rural areas that can be sparsely populated and where citizens potentially face chronic conditions including heart disease, respiratory issues and unintentional injuries – the likelihood of which was noted in the 2020 Executive Order on Improving Rural Health and Telehealth Access, which seeks to improve access to healthcare in rural areas through telehealth technologies.¹⁴

Philips partners to securely deliver the care that is promised to these populations, including virtual technologies like eICUs that employ a "hub and spoke" model. This allows co-located teams of specially trained critical care physicians and nurses to monitor patients and virtual care sites, and also allows for seamless transfer of EHR, diagnostic imaging and other data while shifting the focus to routine and preventative care.

By doing so, Philips aims to help healthcare providers and patients alike have greater confidence that care will be quickly, conveniently and, above all, securely delivered.

Moving forward

In 2020, VA announced that it also plans to invest up to \$100 million over a 10-year period with Philips to expand its tele-critical care program, thereby providing veterans access to the right intensivists and quality care, regardless of their location.¹² With VA managing 1,800 ICU beds nationwide, this expansion not only gives patients access to specialists but also helps them deliver on the quadruple aim: optimizing care costs, enhancing clinician and patient satisfaction and improving outcomes.

By working with partners like Philips to conceive the patient journey as an interoperable virtual care solution, VA is helping to secure the future of patients' health and the integrity of its continuum of care. In the future, VA will be tasked with serving more veterans with greater need. The connected care solutions now in place are secure and scalable, ready to face the evolving needs and changing dynamics of this population.

Learn more about our work with government agencies.

Results from the case study mentioned in this paper are not predictive of results in other cases. Results in other cases may vary.

References: 1. Veterans Health Administration. About VHA. Accessed April 21, 2021. https://www.va.gov/health/aboutvha.asp 2. Gould CE, Rideaux T, Spira A, et al. Depression and anxiety symptoms in male veterans and non-veterans: the Health and Retirement Study. *Int J Geriatr Psychiatry*. 2015;30(6):623–630. 3. Gradus JL. Epidemiology of PTSD. US Department of Veterans Affairs. Accessed August 10, 2020. https://www.tpst/wa.gov/professional/treat/essentials/epidemiology.asp 4. Wounded Warrior Project. 2020 Annual Warrior Survey: Report of Findings. Accessed April 9, 2021. https://www.woundedwarriorproject.org/mission/annual-warrior-survey 5. Holder KA. Veterans in rural America: 2011-2015. United States Census Bureau. Accessed April 21, 2021. https://www.census.gov/content/dam/ Census/library/publications/2017/acs/acs-36.pdf 6. Lin J, Thompson TJ, Cheng YJ, et al. Projection of future diabetes burden in the United States through 2060. *Population Health Mtr.* 2018;16(9):1-9. **7.** Krumholz HM. Where have all the heart attacks gone? *The New York Times*. April 6, 2020. Accessed April 5, 2021. https://www.nytimes.com/2020/04/06/well/live/coronavirus-doctors-hospitals-emergency-care-heart-attack-stroke.html **8.** Baum A, Kaboli PJ, Schwartz MD. Reduced on and increased telehealth outpatient visits during the COVID-19 pandemic. *Ann Intern Med.* 2021;174(1):22–31. **9.** Slightman C, Gregory AJ, Hu J, et al. Projections of video visits using Veterans Affairs telehealth tablets: survey study. *J Med Internet Res.* 2020;15:22(4):e15682. **10.** Military Health System. Beneficiary population statistics. Accessed August 10, 2020. https://www.health.mil/1-Am-A/Media/Media-Center/Patient-Population-Statistics 11. VA Office of Rural Health. Rural veterans. Accessed August 10, 2020. https://www.tealth.mil/1-Am-A/Media/Media-Center/Patient-Population-Statistics 11. VA Office of Rural Health. Rural veterans. Accessed August 10, 2020. https://www.tealth.mil/1-Am-A/Media/Media-Center/Patient-Population-Statistics 11. VA Office of Rur

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