

Telehealth

Video Calls Save VHA Staff, Patients Time

MDCLONE USE CASE

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The VHA's proactive, objective approach and development-in-progress of a prompt for providers to consider a switch from telephone to video for the patient's visit will enable care that has historically been time-intensive and manual to be seamless.

Overview

The Veterans Health Administration (VHA) operates the nation's largest healthcare system and employs a range of technologies to ensure excellent care for its patients. Novel technologies are transforming healthcare, particularly in the wake of COVID-19, and the VHA is leading the development of telehealth for health services. Telehealth is critical to the future of VHA care for the US' Veteran population.

Telehealth provides access to high-quality healthcare services by employing technologies in the information and telecommunications space to provide healthcare services to patients who are separated from providers geographically. The VHA aims to increase access to care for its Veteran population and has placed a special emphasis on patients in rural and remote locations.

At the VHA, video conference visits are preferred by providers and by patients who use them over telephone calls. Video conference visits allow providers to perform some aspects of a physical examination over video and create better rapport with their patients, leading to continued follow-up care and better patient outcomes. Veterans well-versed in the US Department of Veterans Affairs (VA) Video Connect reduce the need for technical troubleshooting from the care team at the time of the encounter. Although video calls are preferred, telephone calls are still the leading telehealth modality used by Veterans today.

Challenges

Veterans need easy access to their VHA care teams, but scheduling appointments and traveling to a provider's office can be difficult and time-consuming, depending on geographic location and clinic access. Ordinary telephone-based calls continue to constitute the bulk of non-in person provision of care in facilities across the VHA.

After reviewing their percentage of telephone encounters, they asked themselves: "How can we identify long telephone calls ("chatty" calls) and prompt providers to make the transition to video conference calls?"

The VHA's proactive, objective approach and development-in-progress of a prompt for providers to consider a switch from telephone to video for the visit will enable care that has historically been time-intensive and manual to be seamless.

This analysis brought upon the question of whether a long, “chatty” telephone call (20+ minutes) would predict a long call in the future. If so, the VHA wanted to know whether lengthy phone calls should be transitioned to video calls during follow-up visits for those patients, as video calls can complement in-person visits, allow for nuances in the patient-physician relationship, and save Veterans and their providers a significant amount of time – from minutes to hours.

Converting these telephone calls into telehealth calls would add clinical value to providers and offer convenient care to the Veterans they serve.

Key Questions

The VHA sought to understand the value in the use of videoconference vs. telephone for comprehensive patient-centric care and asked:

- + What percentage of Veteran telephone calls have a duration longer than 2 minutes?
- + Do longer duration telephone calls (20+ minutes) represent opportunities for encounters to be enhanced by video for a more comprehensive assessment?
- + Do longer duration telephone calls (20+ minutes) add clinical value to providers and offer convenient care to patients?
- + What are the outcomes of the VA Video Connect calls compared with general telehealth phone calls at the VHA?
- + Does the VA Video Connect have a positive impact on overall wellness?

Results to Date

Using MDClone’s ADAMS Platform, synthetic data, and a machine learning tool for its analysis, the VHA found, with a great deal of specificity, that a longer duration telephone call (20+ minutes) would predict a future long call.

Initial analysis of synthetic data available from MDClone provided the following insights:

- + There was a relatively high proportion of telephone calls with duration longer than 20 mins (> 40% for all calls).
- + A future long-duration telephone call was preceded by a “chatty” call during the previous 180 days with ~72% specificity.
- + A long-duration phone call in the near past (approximately the past 12 months) is a very strong correlation to another long-duration telephone call in the future (in the following 12 months). A specificity of ~70% implied that this is an actionable criterion.

Based on the findings of the study, the VHA indicated that schedulers should look at patients who had made a long call in the past and ask them to consider changing to video conference calls for their follow-up visits. Currently, high-value conversions to VA Video Connect are manually flagged, but in the future, auto-flag may be possible. If the

flagged Veteran is naïve to the technology, the VHA envisions initiating a test call virtually or in-person to familiarize them with the platform. It has been shown that VA Video Connect calls provide a more comprehensive platform for patients to handle problems they are encountering.

Using VA Video Connect, or VVC, for future calls can enable care that has historically been time-intensive to be conducted over a video platform, saving patients and providers minutes or even hours of time that they would have otherwise spent on lengthy in-person visits.

The MDClone Value

Being able to access their data with the help of the MDClone ADAMS Platform — a powerful, self-service data analytics platform — the VHA was able to analyze a population of 17,720 patients who had outpatient visits after July 2021.

The VHA was ultimately able to:

- + Generate organized, detailed synthetic data
- + Gain self-service access and query its data
- + Make process improvements and enhancements
- + Uncover insights that will lead to better care of Veterans

The VHA retrieved telephone calls > 20 minutes and < 20 minutes and performed a statistical analysis based on this data to derive new patient insights that aim to drive more patients toward video conference calls and ultimately enable better outcomes in the US' Veteran population.

Forward Thinking

Asking questions and being able to find answers to those questions at an accelerated speed has allowed the VHA to not only improve care for specific Veterans by switching from telephone visit to video visits but has also positively impacted providers' contact with patients from visit time to relationship-building. The speed-to-insight made possible by access to synthetic data and a user-friendly platform created a data-driven action plan that the VHA can use to improve care for Veterans across the country.

With results in hand, the VHA will be able to expand its research of telehealth visits, ask further questions, and explore larger and more varied populations as well as additional aspects of Veteran in-person, telephone, and telehealth visits. The results from future studies will allow the VHA to replicate its intriguing early findings and verify patterns in its data before implementing new strategies in clinical settings.

About the Technology

The MDClone ADAMS Platform is a self-service data environment empowering users to organize and access information quickly, sparking ideas and insights that power research, drive better patient outcomes, and create impactful healthcare innovation.

Data are everywhere. Insights are hard to find.

Navigating data in a health system can be challenging, expensive, and time consuming. Answering simple questions can take months or longer due to siloed systems, complex data models, unstructured data, privacy regulations, and limited support from IT and data teams.

With MDClone's unique underlying technology, healthcare organizations can leverage ideas from across the entire ecosystem, overcoming common obstacles that hinder research, innovation, and collaboration.

Fast Access to Dynamic Data Exploration, Analysis, and Action

The rapid cycle of idea-to-data-to-insight enables healthcare organizations to ask for information, discover insights, act on new understandings, measure performance, and share ideas around the world to improve patient health and outcomes.

- + Independent self-service discovery
- + Interact with all patient data from any source
- + Leverage structureless data
- + Collaborate freely using synthetic data

Learn more at mdclone.com

About Veterans Health Administration

The Veterans Health Administration (VHA) is America's largest integrated healthcare system. The VHA mission is to honor America's Veterans by providing exceptional healthcare that improves their health and well-being.

The VHA Innovation Ecosystem (VHA IE) is the catalyst for enabling the discovery and spread of mission-driven healthcare innovation to advance care delivery and service that exceeds expectations, restores hope, and builds trust within the Veteran community. The VHA IE was established to enable mission-driven healthcare innovation to advance care delivery for Veterans.

va.gov/innovationecosystem