The Right Care at the Right Time and in the Right Place: The Role of Technology in the VHA

VA Deputy Under Secretary for Health for Policy and Services Madhulika Agarwal on leveraging technology to create personalized, proactive, patient-driven care.

Embracing technology is nothing new for the VHA, whether it is telehealth, e-consults, or electronic health records. “The VHA is in a unique position to create the first truly national telemedicine network in the U.S.,” Adam W. Darkins, MD, then acting chief consultant of telemedicine at the VA wrote in a 2001 newsletter. “It is our collective task to make sure that if this happens, we have a system that can ‘plug and play.’”

To better understand the progress in delivering health care, Federal Practitioner decided to devote this entire issue to the topic and to discuss the VHA and technology with Madhulika Agarwal, MD, MPH. As deputy under secretary for health for policy and services, Dr. Agarwal has been at the heart of the VHA’s embrace of many of these technologies for health care delivery and has been in a position to oversee their execution. More than anyone else at the VHA, she is familiar with the potential and limitations of telehealth.

Below is an edited and condensed version of the interview. To hear the complete interview, visit http://www.fedprac.com/multimedia/multimedia-library.html.

Importance of Telehealth to the VHA
Madhulika Agarwal, MD, MPH.

Our goal is to ensure that veterans have optimal health and that we deliver the best health care with a focus on timely access and with an exceptional experience. And over the years, we have been building technologic tools so that we can provide the right care at the right time and in the right place. Telehealth affords veterans the convenience of accessing primary or specialized care services either from their local VA community clinic or from the privacy of their own home.

Now we have many virtual access solutions. The home telehealth, clinical video teleconferencing, store-and-forward technologies, e-consults, My HealtheVet, plus SCAN-ECHO [Specialty Care Access Network-Extension for Community Health-care Outcomes]; and these all have demonstrated that they are mission-critical tools, which improve and expand the access for veterans who may have difficulty accessing care for multiple reasons.

It could be some clinical issues where there are transportation difficulties, such as for veterans with spinal cord injury, or mild traumatic brain injury, or geographic barriers. Many of our veterans, I would say roughly 40% to 45% of them, live in rural and highly rural areas where they may not have access to care nearby. Or it could be further exacerbated with geographic challenges by inclement weather or the drive times. And lastly, I would say it’s the lack of specialists in these rural communities where many of our veterans live.

VHA is successfully integrating into the existing technical administrative clinical infrastructures, and this infrastructure provides a reliable and robust IT network. We have an electronic health record. We provide national policy guidance regarding health information security, credentialing, privileging, etc. And our strategic goal has been to have personalized, proactive, patient-driven care; and telehealth supports that goal.

Improving Veteran Access
Dr. Agarwal. It’s interesting that both the Choice program, which is part of the Veterans Access, Choice, and Accountability Act of 2014, known as VACAA, and telehealth aim at improving veteran access to care. Under the Choice program, many veterans now have the option to access community
partner health care rather than waiting for a VA appointment, or traveling to a VA facility when the geographic distance is more than 40 miles, or if the appointment in the VA is not available for 30 days.

The Choice program and telehealth are 2 very concrete examples of VHA’s transformation from a facility or provider-centric health care delivery model to a model that puts the veteran’s needs at the center and improving the veteran’s access to resources to meet their health care needs.

More than 717,000 veterans have accessed VA care through telehealth in fiscal year [FY] 14, and 45% of these veterans live in rural and highly rural areas. In FY14, the total for veterans using telehealth represented about an 18% growth from the prior year; and the telehealth services provide access to help in more than 45 different specialty areas, including those areas where VHA has a particular expertise, especially, for example, in mental health that may not be available from the local community partner.

*Telehealth Uses*

**Dr. Agarwal.** A veteran who is living in a rural area, let’s just say in some rural part of Maryland, and has to commute to the Baltimore VA, which you know is an inner-city VA medical center, to keep his appointment for a mental health condition with his VA provider. Now, using telemental health, this veteran can access this provider from his or her own home through encrypted video conferencing and complete the telemental health visit in the comfort of his or her own home so that they are not subject to the traffic and other challenges that they would otherwise face and get even more stressed than what they started out with. The ability, the convenience of having the service of counseling or cognitive behavioral therapy into their own homes, is just remarkable.

Another example that I could cite for you would be an appointment in the hearing aid clinic. So a veteran who lives in the Florida Keys normally would have to travel 5 hours from the Florida Keys, go to Miami, stay in a hotel overnight so that they can go to their appointment at 8 AM. Instead, the veteran now can visit the Key West clinic and have his hearing aid adjusted by a VA audiologist who’s located in Miami; and it saves the entire trip.

The third one I will cite you has to do with the C&P [Compensation & Pension] exams. Now, a veteran living even out of the country can access a VA provider in Connecticut or some [other] state, using the encrypted video conferencing; and they can have the whole clinical evaluation for C&P completed using the video conferencing. These are some of the examples of how telehealth has been used very successfully.

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**Madhulika Agarwal, MD, MPH,** is the deputy under secretary for health for policy and services for the VA. Her responsibility is to lead policy and services development for optimal health care outcomes.

In this position, she provides direction to the Office of Assistant Deputy Under Secretary for Health for Policy and Planning and the new Office of the Assistant Deputy Under Secretary for Health for Informatics and Analytics; Office of Public Health; Office of Patient Care Services; Office of Ethics in Health Care; Office of Research and Development; and Office of Interagency Health Affairs.

Previously, Dr. Agarwal served as the chief officer for Patient Care Services. In this position, she led systemwide initiatives to enhance key clinical services that focus on personalized, accessible, high-quality health care delivery, including home- and community-based care services. Dr. Agarwal is a graduate of VA’s Executive Career Field Program and Executive Fellows Program.

**Technologic and Educational Challenges**

**Dr. Agarwal.** We have been a pioneer of telehealth. And with that, of course, all those challenges come into play. And we certainly have implementation challenges that include provider and patient education and their buy-in into the use of technology and providing services as well as the technology itself and some administrative issues. They can all be very closely linked.

You know, one illustrative example that I just cited earlier about video conferencing is one such example into the veteran’s home. It is very convenient…. We started to implement this home telemental health program a couple of years ago. But since then, about 108,000 veterans have accessed the video conferencing technology; but fewer than 2,000 or so have done it from their own home. And that’s largely because the current video visit from home is quite cumbersome. It requires passwords for each visit. It requires that the veteran download VA-licensed software on their own device. And in addition, there are restrictions
because of the availability of the broadband Internet connectivity, which is required for the video visit—more so in the rural areas.

Our general counsel is reviewing and attempting to resolve state licensure requirements that have been raised by some states, because the veterans here receive care at home and outside of our VA brick-and-mortar facility, as well as the legality of VA providers potentially prescribing a controlled substance for a veteran at home without a prior in-person office visit.

But to overcome the provider challenges, the national telehealth training and resource center has been working on training the providers in the use of telehealth. Roughly 11,400 VA staff have been trained in the use of telehealth in FY14. We have currently 144 facility telehealth coordinators and more than 1,100 telehealth clinical technicians who assist with training and outreach for both VA staff and veteran patients.

**Legal/Security Challenges**

**Dr. Agarwal.** High-speed connectivity happens to be one of the key ones.… Using 4G services, I think, is going to be essential for every veteran regardless of rurality. And when these 4G services are not available, that certainly hinders the ability to provide telehealth to all veterans. Having the right security with full data encryption is essential so that we can protect the private health information of the veterans.

But unfortunately, at this time, there is not an easy way to do that. I think a lot of innovation is required so that we can make it much easier for the veterans with 1-button access, both for the veterans as well as for the providers. And that’s going to require significant effort in the grid technology as well as overcoming certain legal requirements.

**What Is Driving Telehealth?**

**Dr. Agarwal.** The real driver here has to be the veterans’ needs, not the needs of telehealth nor the clinical services or operations. I think the whole goal here is that we must use technology to the extent possible. We have to move toward virtual access as the norm.

As much as possible, we should provide the virtual access in the veterans’ homes or wherever the veterans would like to receive their services. Make the connectivity as simple as possible for the veterans and move beyond the concept of the episodic visit so that the health information and self-care management tools are available to the veterans at all times. And that essentially needs to be the overarching strategy, and that should drive

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**A View of Telehealth Over the Past Century**

- **Civil War era:** Telegraph is used to communicate casualty lists and supplies needed for field hospitals
- **1910s–1970s:** Two-way radio applications include ship to shore and rural facilities communication with urban medical centers
- **1970s:** Satellite connection is used between remote Canadian and Alaskan frontiers to urban medical centers hundreds of miles away
- **2000s:** Home-based monitoring of patients living in distant sites—using telephone, Internet, or video-phone—helps to identify early symptoms and promote self-care
- **Early 1990s:** Telephone is used by physicians to communicate and consult with colleagues in distant locales
- **1950s:** Closed circuit television is used for the first interactive link between the Nebraska Psychiatric Institute and 3 VA facilities
- **1990s:** Internet is the pathway to provision of medical information to the public and sharing of resources among health care providers

how we develop the technologies to provide the services.

Data Analysis

Dr. Agarwal. We have the general enrollee data. We look at access gaps in clinical services and the telehealth activity data for our program management and oversight as well as in developing an overarching strategy for the clinical services and telehealth services. It’s done somewhat in conjunction. And our outcome analysis shows that there has been significant reduction in admissions and bed days of care with the use of telehealth.

For example, in FY14, an analysis of 10,621 veterans who were newly enrolled in home telehealth with noninstitutional care needs and chronic care management categories had a decrease of about 54% of bed days of care. This was about a 32% decrease in the hospital admissions compared [with] the same patient data prior to the enrollment and home telehealth. The analysis of telemedical health outcomes shows that there was a 35% reduction in acute psychiatric bed days of care for veterans receiving CBT [cognitive behavioral therapy] or the clinical video conferencing telemental health in FY14 when it was compared [with] the utilization in the prior year.

Telehealth Pilot Programs

Dr. Agarwal. I must admit that there are many more programs that begin in the facilities, but at the national level. The first one is the tele-ICU implementation, where VISN 23 is supporting 5 of the medical centers with clinical video teleconferencing capability for live interactive consults with ICU specialists; and it covers about 78 beds. VISN 10 is supporting VISN 7 in 7 of their medical centers, which covers about 72 beds.

Another program, which is in the pilot phase right now, is the tele-wound care pilot, which is being implemented in 6 VISNs and combines the use of home telehealth, clinical video teleconferencing, and store-and-forward telehealth technologies to create access to a continuum of wound care options across multiple patients and provider settings and locations, all with the goal of enhancing and improving wound care treatment and healing…. The initial phase has been that all the participating facilities have been identified, and some of the operations manuals have been developed.

The third quarter of this year, we will have a completion of the operations manual Provider Training and Treatment Template. The local sites are also working on the infrastructure and knowledge base so that this project can be completed by FY15.

And the last highlight that I’ll mention, which is in its very early stages, is a low-acuity/low-intensity pilot with the focus on health promotion and health prevention behaviors, such as tobacco cessation, weight management, and newly diagnosed but stable veterans with diabetes, high blood pressure, and heart failure, using a web-based browser technology.

VA Telehealth Leadership

Dr. Agarwal. Overall, when we start to look at the monumental impact of technology on other industries, such as banking, shopping, travel, and even personal communications, the emerging technologies continue to change the overall landscape of all these environments. This is an exciting time to be in the health care industry, because I think we have lagged somewhat behind in using technology. But as we look forward, the consumer-driven health care is going to become the norm.

As you know, VA has long been a pioneer with electronic medical records and with virtual modalities, such as telehealth both in the home and in the community, the use of patient web portals, such as My HealthVet, secure messaging for various apps, kiosks; and we remain on the forefront of developing and utilizing these approaches to enhance health care delivery.

We all know that health care in the U.S. is complex and fragmented. VA is looking to become the benchmark in U.S. health care delivery, aiding in the transformation of the delivery of services for veterans and families, focusing on unified, integrated, and personalized virtual services that seamlessly connect them with the state-of-the-art health care system.

REFERENCE


Dr. Robert Bonello on How Patients Benefit From ICU Telemedicine

Visit www.fedprac.com for the complete interview.