Federal Telemedicine

Telemental Health From the "Outside In": Telework Options for Efficient Patient Care

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The VA has an increasing need for psychiatrists and other mental health providers as it pursues the goal of timely access to mental health care. However, increasing numbers of employees further tax the space limitations at its facilities. Telework, via secured videoconferencing technology, enables a provider to deliver care to clinic patients from outside VA brick-and-mortar locations.

The VA is the largest provider of mental health care in the U.S.[1] On April 19, 2012, Secretary of Veterans Affairs Eric K. Shinseki addressed the increasing need for access to mental health care by announcing the goal of adding about 1,600 mental health clinicians for patient treatment. Increasing the number of accessible hours is the latest development in an ongoing effort by VA to reduce potential barriers to patient care. In the mid-1990s, adding community-based outpatient clinics (CBOCs) to the existing VAMCs was a means to reduce geographic barriers by increasing the surface area of VA care, especially for VISNs with large catchment areas. Mental health specialty staffing of the CBOCs was accomplished by hiring new local providers as well as by having existing VAMC providers "ride the circuit" to the satellite locations. However, the ratio of travel time vs face time with patients limited specialty provider efficiency when travel time represented or exceeded a given CBOC's scheduled patient demand. This limitation in VAMC specialty staffing of CBOCs resulted in continued use of non-VA fee-based providers for rural patients, which limited the goal of total internally integrated VA clinical management of patient needs.

ADDRESSING TIME AND GEOGRAPHIC ACCESS NEEDS

The challenge of serving a large geographic area with varying patient mental health needs has been addressed in some settings by leveraging the substantial strength of information technology (IT) resources and expertise within the VA enterprise. The VA's Internet-based Computerized Patient Record System (CPRS) is the most widely employed electronic health record in the world and represents a common clinical documentation platform for providers, regardless of location. The VA, among many other federal agencies, has developed expertise in deploying stand-alone videoconferencing hardware units as well as software-based applications to allow video services between VAMCs and CBOCs. The latter represent little if any direct cost

This inaugural article marks the introduction of the column *Federal Telemedicine* and lays the foundation for a platform that will present new developments in communication, data-gathering technologies, best clinical practices, and administration of electronic health solutions for patient care in the VA, DoD, and PHS. The column's coordinator is Jeffrey R. Zigun, MD. Dr. Zigun has worked at the VA since 2006, exclusively in telepsychiatry, and was one of the first health care professionals in VISN 12 to transition from VAMC-based to home telework status. Please send suggestions for future columns to DrZigun@TelepsychiatryUSA.com.

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to the institution beyond the personal computer (PC) on which it is running and a high-definition camera usually costing less than $100.

The centralized clinical and IT resources at VAMCs led to the development of a hub-and-spoke model (similar to airline travel networks) in which a larger VAMC serves as a hub with many small CBOC spokes for telemental health (TMH) services. For example, beginning in 1997, psychiatric services were provided in VISN 12 between the larger Clement J. Zablocki VAMC in Milwaukee, Wisconsin, and the smaller Oscar G. Johnson VAMC in Iron Mountain, Michigan, and its CBOCs. The initiative began between the 2 VAMCs and expanded to providing clinics to 8 other facilities, covering distances of hundreds of miles. There have also been initiatives between VA provider "near end" hubs and private clinic "far end" spokes, such as connecting veterans via the private Richford Health Center in Richford to the White River Junction VAMC Mental Health Clinic in White River Junction, both in Vermont.[2] In addition to providing telepsychiatry medication evaluation and management services, VA has demonstrated the efficacy of TMH-based psychotherapy (eg, evidence-based practice for posttraumatic stress disorder).[3]

In one of the most exciting and transformative initiatives in patient care, VISN 20 began its Home Based Telemental Health Pilot Program in February 2010.[4] This model moves the site of care from the "brick-and-mortar" of a VA facility to the patient's home. The program not only makes access easier, but also provides the ability to conduct in situ behavioral desensitization techniques—literally where the patient lives—while also offering the therapist direct insights about a patient's home environment, family interactions, and other personal habits.

CARE FROM THE "OUTSIDE IN"

Secretary Shinseki's announcement of increased mental health staff will further challenge office space limitations on site for VA facilities, but coinciding initiatives provide a new solution: telework. On June 16, 2011, in Washington, DC, Deputy Secretary W. Scott Gould spoke at the Telework Summit and Kickoff of the VA Telework Pilot.[5] He quoted President Obama's words at the White House Forum on Workforce Flexibility: "Work is what you do, not where you do it," and commented, "Those words speak to the President's commitment to bring the business of government in line with new technologies, new workforce demographics, and new and evolving people-centric business models."

Deputy Secretary Gould outlined the various benefits of appropriate deployment of telework options: (1) a recent administration report estimates that widespread adoption of flexible workplace schedules could save roughly $15 billion a year through greater productivity, lower turnover, and reduced absenteeism; (2) reduces the strain on our transportation infrastructure as well as traffic congestion and accidents; (3) cuts commuting costs; (4) decreases work-space needs and the associated administrative and maintenance costs that go with it; (5) improves our disaster preparedness posture, because fewer high-density work sites mitigate the chances of urban terrorism; (6) supports the Americans with Disabilities Act by widening the scope of employment opportunities available to the disabled and by eliminating the often difficult task of physically getting to and from the workplace; and (7) aids a work–life balance.

In addition to standard psychiatric knowledge and skills, federal psychiatric practitioners at VA, DoD, and PHS (Bureau of Prisons and Indian Health Service) develop cultural awareness and credibility working in each unique psychosocial context. Working within a patient's cultural or institutional milieu is of great value—perhaps lost when a provider needs a geographic move related to semiretirement or for family needs, for example. Telework may provide a clinic a means to retain services from the psychiatrist even after such a move.[6]

NUTS AND BOLTS TO DEPLOY A TELEWORK PROVIDER SITE

Telework from a home office requires attention to quality and privacy factors necessary for good patient care from the near end of the videoconference; this includes appropriate lighting and soundproofing, both to prevent provider and patient distraction as well as to maintain patient confidentiality. While much staff and administrative communication will likely occur via e-mail or Microsoft® Office Communicator, the psychiatrist should have a dedicated phone line (see Technical Recommendations) to take calls from the VAMC or CBOC staff. Digital paperless communication should be used as much as possible. Guidance should come from the psychiatrist's privacy officer regarding handling of any protected health information (PHI) paper documents.

Technical Recommendations

Communication Equipment:

- Government-furnished equipment that allows for IT support and software updates
- Personal computer or laptop with 2 video outputs and 2 monitors:

  - One for the Cisco Jabber® TelePresence videoconferencing software (eg, the enterprise Skype™-like application, which provides a video experience directly on computers, tablets, and smart phones)
  - One for applications such as Microsoft® Outlook or Communicator or CPRS
- Dedicated phone line, such as a softphone (ie, separate telephonic software)
- Wireless cellular modem in case the provider's Internet service fails
- Stand-alone videoconferencing codec (coder-decoder) unit

Privacy Measures:

- Connection of government-furnished equipment PC to the Internet via virtual private network (VPN), such as VA's Rescue VPN, which provides a secure "encrypted tunnel" for transmission of PHI, a concern for psychiatric care, as well as public key infrastructure encryption or restricted permission forwarding of e-mail.
- Do not include PHI in Microsoft® Office Communicator communications. (For example, the clinician should refer to a patient as the "10 o'clock patient" and not by name.)

Cultural Recommendations

Videoconferencing technology is a tool for health care delivery and not a driver itself. Cultural awareness of both provider organization and patient care location are key to a successful deployment. The successful launch of telework and of other TMH initiatives requires administrative and IT champions to reassure existing brick-and-mortar providers of the quality of service for patients and successful integration within the larger clinical institution.

Providing care across a broad geographic area requires greater attention to liaison functions. The provider must be acclimated to ancillary services such as VA or local pharmacies, laboratory availability, local cultural needs and expectations, or local events. Coordination with primary care requires added attention and must be promoted, as "curbside conversations" (ie, bumping into colleagues in the hall) no longer can occur spontaneously. To avoid the experience of cultural whipsaw and time zone confusion, it is recommended that clinics be assigned in 2- to 4-hour slots for each far end site. Since urgent needs may periodically require breaking these schedules, it is helpful for each far end clinic location to place a sign on the wall behind the patient, allowing the provider to rapidly reorient to the surrounds.

CONCLUSION

Transforming existing brick-and-mortar-based providers to TMH providers requires an incremental appreciation of the aforementioned factors. New hires should not begin VA service provision via telework; the VA may well require the development of a physical "boot camp" if any providers are hired to begin patient care directly from a telework platform.

The VA's efforts are broad and ever growing, with the mission to fulfill the social contract America has with its warriors: They have served us, and we must now serve them. Telework within the TMH realm is yet another means to fulfill that mission.

Author disclosure

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