Telehealth Services in the Department of Veterans Affairs (VA)

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The Vision For Telehealth In VA

Patient Focused

Makes the home or local community the preferred site of care

Provides the right care - in the right place - at the right time

Helps coordinate care across the continuum

Accessible as part of patient-facing virtual services

Offers just-in-time care

Supports both patients and caregivers

Forward Looking

Functions across platforms and devices to be accessible across a wide range consumer electronic products

Flexibly incorporates new modalities of care

Moves beyond simple transfer of data and communication to include knowledge management

Identifies VA as the national leader in the use of innovative technologies to promote patient-centered care

Results Oriented

Demonstrates reduced utilization of health care resources

Promotes VHA as health care provider of choice

Focuses on patient self-management and shared decision-making

Uses patient-facing technologies to capture routine activity and outcomes data

Definitions of Telehealth in VA

Clinical Video Telehealth (CVT)	Real-time videoconferencing between VA medical centers and CBOCs that replicates face-to-face consultations between patient and provider, or provider to provider. Uses include specialty consultations and delivery of mental health services.
Home Telehealth (HT)	Monitors patients and manages diseases through video into the home and use of mobile devices for acute and chronic care management and health promotion/disease prevention.
Store & Forward Telehealth (SFT)	Acquisition, storage, and forwarding of clinical images to experts for review. Currently used for teleretinal imaging and teledermatology.
Teleradiology	Remote analysis of radiology and nuclear medicine images.
Secure Messaging	Enables timely and secure text-based communication with patients via mobile phones.
Mobile Health	Smart phone applications for self management of health conditions 24/7. Example is PTSD coaching.

Scope of VA Telehealth Services

Clinical Video Telehealth (CVT)

Real-time video consultation that covers over 44 clinical specialties including: Tele-Intensive Care, TeleMental Health, TeleCardiology, TeleNeurology, TeleSurgery, Women's Telehealth, Tele-Primary Care, TeleSCI care, TeleAmputation Care, TeleAudiology, TeleSpeech, Remote Nursing Home Consultation, TelePathology, etc.

Home Telehealth (HT)

Care and case management of chronic conditions and provision of non-institutional care support to patients. Uses in-home and mobile technologies to manage diabetes, chronic heart failure, hypertension, obesity , head injury, depression, etc.

Store and Forward Telehealth (SFT)

TeleRetinal Imaging, TeleDermatology, TeleWound Care, TeleSpirometry, Tele-Sleep Studies TeleCardiology.

VA National Telehealth Programs (1)

Clinical Video Telehealth (CVT)

Supported the care of 202,823 Veterans in FY2013, care that encompasses more than 44 clinical specialties and provides timely and convenient access to specialist and primary care services. Links hospital and hospital, and hospitals with clinics using real-time video conferencing technology on VA's clinical enterprise video conferencing network (CEVN). Over 7,650 clinical videoconferencing units (commercial-off-the-shelf {COTS} products purchased under national contract) are supported by CEVN. These units interconnect via direct dial Internet protocol (IP) connection according to a national dial-plan. Standardized business processes are in place with systematic coding of activity and routine outcomes data available at a national, regional and local level.

VA National Telehealth Programs (3)

Home Telehealth (HT)

Supported the care of 144,520 Veterans in FY2013. Optimizes care for patients with chronic conditions in their homes. Provides non-institutional care, chronic care management, acute care management and health promotion/disease prevention. Uses COTS technologies in the home that link to enterprise level VA information technology (IT) support. COTS products are purchased on national contract. Standardized business processes are in place with systematic coding of activity and routine outcomes data available at a national, regional and local level.

VA National Telehealth Programs (2)

Store-and-Forward Telehealth (SFT)

Supported the care of 311,369 Veterans in FY2013. Enables the acquisition of clinical Images at sites close to the patient, and for the interpretation and reporting of these to occur remotely and asynchronously. Currently the major areas of SFT care in VA are TeleRetinal Imaging (to screen for diabetic eye disease and prevent avoidable blindness), TeleDermatology and TelePathology. New programs under development include TeleWound care, TeleSpirometry and TeleCardiology. TeleDermatology services to Veterans by SFT have increased by 279% over the past three years to over 45,000 patients receiving care in FY 2013. Standardized business processes are in place with systematic coding of activity and routine outcomes data available at a national, regional and local level.

VA Telehealth Services – Outcomes (1)

VA Telehealth

Is recognized as an international leader in telehealth development/implementation.

In FY2013 VA specific Telehealth Applications (CVT, HT and SFT) provided care from 151 VA Medical Centers (VAMCs) and over 705 Community Based Outpatient Clinics (CBOCs) to **608,900 patients**; This amounted to **1,793,496 telehealth episodes of care.**

Forty-five percent (**45%**) of these patients lived in rural areas, and may otherwise have had limited access to VA healthcare; The number of Veterans receiving care via VA's telehealth services is **growing approximately 22%** annually.

In FY2013, of the 144,520 Veterans enrolled for home telehealth services in VA, **41,430 patients were supported by HT to live independently** in their own homes, patients who otherwise would have needed long-term institutional care.

VHA Telehealth Services: Outcomes (2)

Reductions in Utilization FY 2013

Home Telehealth - reduces bed days of care – 59%

Home Telehealth – reduces hospital admissions – 35%

Clinical Video Telehealth – reduces bed days of care 38% for mental health care

Patient Satisfaction

Home Telehealth - 84% mean score

Store-and-Forward Telehealth –95% mean score

Clinical Video Telehealth - 94% mean score

Travel Reduction Savings

Clinical Video Telehealth – $34.45 per consultation

Store and Forward Telehealth - $38.81 per consultation

Home Telehealth Savings

$1,999 per annum per patient

VHA Telehealth Services – Telemental Health

TeleMental Health

Since FY2003, VA has delivered over **1,100,000 patient encounters** from 150 VA facilities to more than 610 CBOCs, a 23-fold increase in consultations over these years.

In FY2013, VA delivered over **278,000 patient encounters** to over 91,000 patients, this activity took place between 150 VAMCs and 610 CBOCs.

In FY2010, VA established a National Telemental Health Center. In FY2012, this center provided 1,251 video encounters to 427 unique patients at 24 sites that were in 13 states.

The scope of VA's telemental health services includes all mental health conditions with a focus on post-traumatic stress disorder, depression, compensation and pension exams, bipolar disorder, behavioral pain and evidence-based psychotherapy.

In FY2013, chronic disease management provided via home telehealth devices supported **7,430 patients** with chronic mental health conditions to live independently in their homes **and 2,284 patients** had video consultations directly into their homes.

Unique Challenges in Developing Telehealth

Training

Telehealth training is not offered in medical schools, or included in health professional curricula. More than sixty requirements exist for establishing new telehealth programs that are beyond the competency of most individual VA staff (e.g. scheduling, privileging, Memoranda Of Understanding (MOUs), IT compatibility, etc). VA has to train providers, and support patients, as they participate in the delivery of care using telehealth.

Technology Support

With over 7,650 sites of care many in rural and remote locations, technology support is a critical success factor in developing telehealth services, and a risk that must be mitigated in their subsequent sustainment. Telehealth crosses traditional boundaries between information technology and biomedical engineering services, requiring comprehensive and dedicated support.

Quality Management

The Joint Commission does not survey health care organizations specifically for telehealth but, because of the high volume of telehealth in VA, it encounters telehealth during "Tracer" reviews. Poor practices in the implementation and delivery of telehealth-based care could expose VAMCs to questions regarding the safety and adequacy of their telehealth programs.

Addressing Telehealth Training in VA

National Telehealth Training Resource

VA has a national telehealth training resource that provides staff with the training materials that enable them to meet defined competencies for CVT, SFT and HT. Standardized training and resource materials are developed, and annually updated, to accomplish this. The mission is to deliver "the right training, in the right place, at the right time". The vision is that "all VHA staff delivering telehealth services have standardized training and performance support to competently deliver these services".

Training Materials and Content Delivery

Standardized operations manuals systematize the delivery of CVT, SFT and HT care in VA. These form the basis for curricula that are developed in conjunction with designated subject matter experts. Given VA's national footprint for telehealth , and its focus on patients in remote and rural areas, 98% of telehealth training in VA takes place virtually. Content distribution is via multi-media, and social media networks, to promote collaborative learning.

Training Metrics

In FY2012, over 4,000 staff received telehealth training in VA through 1,800 unique training events and support was provided for system-wide competency testing for CVT, SFT and HT.

Addressing Telehealth Technology Support in VA

Telehealth Technology Platforms

VA has national technology platforms for CVT, SFT and HT. These platforms support COTS products purchased under national contracts that provide the patient facing interfaces for CVT, SFT and HT. The technical specifications of this infrastructure meet defined business requirements. As clinical needs grow and the technologies evolve the platforms for CVT, SFT and HT are converging with one another, and with other virtual care modalities.

Help desk Support

Advances in information and telecommunications technologies are blurring the distinctions between information technology (IT)and biomedical engineering (Biomed). Care delivery into rural/remote locations and into the home present challenges to providing technical support from VAMCs. VA has developed an integrated solution that uses a telehealth-specific Tier 1 Telehealth Technology Help Desk that is supported at the Tier 2 level by IT and Biomedical Engineering.

Ensuring Clinical Encounters

Buy-in, and support for telehealth, from patients and clinicians depends on robust and reliable services. VA's Telehealth Technology Help Desk answers all calls within 6-27 seconds with 3% referral rate to Tier 2.

Addressing Telehealth Quality Management in VA

Networks of Care

Health care is traditionally provided in fixed physical facilities and quality management processes centered on care related to this "bricks and mortar". By definition telehealth crosses between physical sites of care, and quality management processes - including routine outcomes monitoring, credentialing & privileging, and Joint Commission reviews. With telehealth these activities occur across a network of care, not within a single facility.

Conditions of Participation

VA internally "accredits" all CVT, SFT, HT and Tele-ICU programs in a bi-annual review process called conditions of participation, one that has been in place since 2007. These reviews ensure VA's telehealth programs meet minimum standards, institute any corrective actions, and share best practice.

Local, Regional and National Dashboards

VA has developed local telehealth dashboards that incorporate CVT, SFT and HT quality indices that are used for quality management and business development.

Telehealth in VA - Summary

Transformational

Telehealth is one of VA's major transformational initiatives, one aimed at making care convenient, accessible and patient-centered. In FY2013, 11.0% of Veterans received elements of their care via telehealth. This amounted to 608,900 patients who participated in 1,700,000 telehealth episodes of care. Telehealth in VA provides mission critical services that help Veterans to live independently in their own homes and local communities.

Robust and Sustainable

Telehealth is a radically different way for patients to receive, and clinicians to provide, care. There are 60+ steps to ensuring a telehealth program is safe, effective, cost-effective and sustainable. VA's processes and procedures for training, technology support and quality management are indicative of the "systems" approach VA has taken in all 60+ steps it has implemented telehealth across 7,650 sites of care.

Visionary

Telehealth in VA is the forerunner of a wider vision, one in which the relationship between patients and the health care system will dramatically change with the full realization of the "connected patient". The high levels of patient satisfaction with telehealth, and positive clinical outcomes, attest to this direction being the right one.