VHA HOME TELEHEALTH TECHNOLOGY

Technology Overview

Home Telehealth (HT) technology in the VA is secure telecommunications technology used to provide clinical care and promote patient self management as an adjunct to traditional face-to-face care. Health Information is exchanged from the Veteran's home or other location to the VA care setting, and alleviates the constraints of time and distance.

VHA’s Home Telehealth model is focused on:

- Veterans with chronic diseases, such as, but not limited to, diabetes, hypertension, heart failure, post-traumatic stress disorder, depression, spinal cord injury, traumatic brain injury and chronic respiratory disease
- Making the Veteran’s home the preferred place of care when appropriate
- Focusing on Veterans whose treatment incurs 20-30% of health care costs and resources
- Providing non-institutional care support for Veteran patients and their caregivers
- Assisting Veteran patients to self-manage their disease, when this is possible
- Providing patient navigation support (i.e. for chronic disease management)

Home Telehealth technology is ordered for and provided to Veterans by HT staff in collaboration with the Veteran’s medical provider. They use a standardized internal VA process involving the Home Telehealth staff, Prosthetics staff, and staff at VA’s Denver Acquisition & Logistics Center (DALC) using its Remote Order Entry System (ROES).

VHA has implemented Home Telehealth using a standardized approach to include the implementation of Home Telehealth technologies. VHA has established secure environments for the acquisition, storage and transmission of patient data associated with Home Telehealth from Home Telehealth vendors under VA contract. All telehealth equipment passes rigorous IT standards before they are available on VA contracts. This ensures the secure transmission of patient sensitive data behind VA firewalls. Only these commercial-off-the-shelf (COTS) technologies that are accessible under a national contract can be used in VA Home Telehealth programs. These technologies are placed in patients’ homes or are used via patients’ own land telephone line or cell phone, connect to servers behind the VA firewall and are supported by the appropriate vendors for the purposes of downloading and uploading health data. Home Telehealth staff can monitor patients’ conditions and health data on an ongoing, rather than an episodic basis during regular weekday business hours.
**Technology Components**

**In-home messaging device:** A unit that provides a set of questions for responses as well as education and self management skill building opportunities via a Disease Management Protocol (DMP) or combinations of DMPs. Patient responses are sent to staff and are then risk stratified for timely intervention.

**Video telemonitor:** Home Telehealth devices use both audio and video components that include peripheral devices such as stethoscopes and other vital sign monitoring equipment. VA video with Veterans at home currently uses both Plain Old Telephone Service (POTS) technology transferring video across telephone lines, as well as higher speed Internet Protocol (IP) technology to transfer video.

**Interactive Voice Response (IVR):** IVR technology provides a messaging service using DMPs that is activated from a land telephone line or cell phone. The Veteran user can use his or her voice or touch the number pad on the cell phone or landline telephone to generate answers to questions about his/her health daily.

**Home Telehealth Peripheral Devices:** Telehealth peripheral devices are used in conjunction with the main Home Telehealth device (hub unit), such as the telemonitor or messaging device, based on clinical application. Typically, these devices are blood pressure monitors, heart rate monitors, weight scales, stethoscopes, glucometers, and pulse oximeters. However, these peripheral devices cannot be cabled or blue toothed at this time for use with IVR.

**Website/Links:**

Learn more about VHA Home Telehealth on the VHA Telehealth Services Web site at