Title: The implementation of clinical video telehealth (CVT) in a surgical practice within a VA Medical Center

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Description
Telehealth-based care was implemented as a pilot program in 2000 for 800 Veterans and determined to be successful. It was fully promoted, beginning in 2003, as a viable option for the delivery of high quality health care to Veterans. It has now been fully integrated as an essential component within the VA health care system. As of 2012, the VA provided care to 500,000 Veterans using 1.4 million telehealth-based consultations delivered from 150 VA Medical Centers and 750 Outpatient Clinics. Of those, 148,000 participated in home-based consultations, 119,000 received telehealth care directly within their homes, and 76,000 received telemental health consultations. Implementation of these types of services expands Veteran access to high quality primary care and specialty care. This type of care coordination resulted in a 25% decrease in hospital bed days and a 19% reduction in admissions. The VA’s mission is to provide our Veterans with the right care in the right place at the right time through the effective and appropriate use of telehealth technologies. The vision is to make the home and the local community center the safe and desired place of care when possible and as indicated. In practical terms, it means not having to travel to the Medical Center, eliminating travel time and the anxiety associated with traveling or with missing work. It means avoiding the costs associated with travel (as the VA reimburses Veterans for travel), and avoiding stress associated with parking. It means minimizing missed opportunities and improving access by increasing clinic capacity. Overall, the most important impact of telehealth is on Veteran perceptions – the opportunity to use telehealth to provide care near home has improved Veteran satisfaction considerably. The three types of telehealth techniques currently used by our VA providers include: clinical video telehealth (CVT), home telehealth and care coordination store and forward. CVT offers VA clinicians real time, secure, and reliable videoconferencing. It allows them to safely and accurately assess a patient to then define strategies for management without being in the same location. The Indianapolis VA has implemented CVT quite effectively in numerous clinical areas: Mental Health, Nutrition and Dietary, Spinal Cord Injury, Dermatology, Chaplain Services, Genetic Counseling, Interventional Pain, and Pharmacy. However, CVT penetration into the surgical services remains limited. In 2011, we introduced the use of CVT to surgeons in the specialties of colorectal and general surgery. Equipment and training was provided by the Telehealth staff and outcomes measured using a standardized satisfaction
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survey, and the estimated cost avoidance calculated based on the distance traveled from home to the clinic. In the first year of the pilot (fiscal year 2012) CVT was used twice, by FY 2013 CVT was used to perform 178 consults and visits, and in the first month of FY 2014 we have already performed 26 visits; on track to evaluate over 260 Veterans using CVT. We have demonstrated that Surgeons can quickly learn to use CVT and that they use it effectively to evaluate and assess patients. Veteran satisfaction has improved and cost related to travel reduced.

Goals & Objectives

1. To improve Veteran satisfaction (as determined by CVT Satisfaction Survey – VA Form 10-0481a)
2. To improve Provider satisfaction (internal surveys)
3. To reduce travel pay costs (estimates based on distance to the Medical Center)
4. To create clinic capacity in order to meet the national VA metrics related to access <14 days from desired date (national VA performance metric)

How did you accomplish this innovation?

In fiscal year (FY) 2010, the Secretary of the VA, Eric Shinseki, identified Telehealth as one of the VA’s transformation initiatives within the New Models of Health Care (NMOC/NMHC) T21 initiative. T21 Telehealth provided funding to our Veterans Integrated Network (VISN 11) with the goals to: 1. Grow the existing enterprise models of Telehealth during FY2010-FY2012 2. Implement specific pilots for new models of Telehealth services for widespread implementation in the future VISN 11 and Indianapolis received the following support: • FY11: VISN received $3.5 million for Telehealth Equipment o FY11: Indianapolis received $880,000 o FY12: Indianapolis received $188,000 • FY11 & 12: received $3.4 million for Telehealth Staff o FY11: Indianapolis received $715,000 for staff expansion o FY12: Indianapolis received $625,000 for staff expansion • FY13: Indianapolis received sustainment funds of $234,000 Indianapolis hired 5 staff specifically for Clinical Video Telehealth. These positions were new to the VA. The new staff were Telehealth Clinical Technicians. New Positions required certification in each telehealth modality (CVT, CCSF and HT). Training of new staff was coordinated and facilitated by the 3 national telehealth training centers: Sunshine Training Center (for HT) • Boston Training Center (for CCSF) • Rocky Mountain Training Center (for CVT) Overall training was monitored by the VISN 11 Network Office and the Office of Telehealth Services. Early telehealth integration followed the Law of Diffusion of innovation. Our initial strategy targeted early adopters within all specialty services as well as, focusing on services that were the least resource intensive. VA national performance measure targets were established for each fiscal year.

How did you evaluate and measure the impact of your program/intervention (e.g. measures, data tools, etc.)? What were the measures of success?
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1. VA national performance measures were established for each fiscal year. The FY 11 - FY 14 Indianapolis Performance Targets: Telehealth Service FY11 FY12 FY13 FY14 CVT 2000 pts. 20% of unique touched 15% of unique 16% of unique encounters by virtual care Veterans touched by Telehealth modalities 2. Provider satisfaction - internal facility surveys 3. Veteran satisfaction - VA Form 10-0481a 4. Estimate reduction in travel pay costs (cost avoidance) 5. To increase clinic capacity by meeting the VA national performance metric: clinic access < 14 days from desired date

Describe your results. What was the impact or significance of this innovation (e.g. improved quality, culture change, decreased costs, improved patient satisfaction, etc.)?

1. In FY 13 Indianapolis provided 2,187 Clinical Video Telehealth visits (this includes colorectal surgery and general surgery). • Average distance traveled per patient: 91 miles • Total miles saved: 189,609 miles • Total Beneficiary travel costs avoided: $78,687 2. Patient Satisfaction results for Clinical Video Telehealth (aggregated for FY 13): 85% approval rating. 3. Recognized by VISN 11 as a Best Practice: Indianapolis VA designated space for Clinical Video Telehealth visits, this allows telehealth flexibility with scheduling resources (provider time, equipment etc...) and eliminates the need to compete for space. 4. Data for pilot initiative in colorectal surgery and general surgery: FY 11 FY 12 FY 13 Number of CVT visits 0 2 178 *178% growth within three years 5. Our colorectal and general surgeons are extremely satisfied with CVT and the outcomes as related to Veteran satisfaction, referring provider satisfaction and they recognize and appreciate the costs saved by the VA in travel pay. These surgeons have recommended the use of CVT to their colleagues within other specialties, and they now serve as champions for the Medical Center in promoting telehealth. Other surgical and anesthesia services have already begun to utilize CVT in their practices, these include: Vascular Surgery, Orthopedic Surgery, Pain Clinic, Thoracic Surgery, Gynecology, and Anesthesia Pre-op Clinic. For FY 13 all of these services accounted for 1459 CVT encounters.

Provide examples for how this proposal can be scaled/replicated within and/or across institutions.

A substantial amount of resources were invested into expanding the telehealth infrastructure and in training staff. With the current solid infrastructure in place, Telehealth scalability is no longer limited by equipment or bandwidth constraints. Additional increase in staffing levels has allowed for dedicating staff to each distant site, each technician is now dedicated to providing telehealth services and in facilitating visits. Surgery Service’s impact on telehealth has grown significantly since the introduction in FY 11. Increased interest amongst providers to try to apply telehealth within their specific specialties will no longer be restricted by the lack of telehealth resources. The Telehealth Program has ensured the ability to offer 4 CVT consultation opportunities simultaneously. Also, each site has been given a sub-initiative to ensure that at least 2 specialty care sessions and 2 group education sessions are provided at each CBOC.
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Please describe how this innovation integrates at least two of the three academic medicine mission areas: clinical care, education, and/or research?

The use of telemedicine impacts all providers within all specialties and it impacts all trainees within all specialties. Telehealth is an integral part of the current clinical practice of medicine, surgery, psychiatry and every other specialty. Our trainees (students and residents) in surgery are increasingly being exposed to these new advances in telehealth and are learning how to become expert users of such technology. They are often seen working side-by-side with our surgeons in performing CVT. Research opportunities exist in defining safety and quality in the delivery of health care via telehealth. Also, clinical research opportunities exist for assessing true cost savings and in assessing the impact on access by using telehealth technology such as CVT.