Telehealth

Telehealth is a rapidly developing application of clinical medicine where medical information is transferred via telephone, the Internet or other networks for the purpose of monitoring health status, providing health education, consulting and sometimes to provide remote medical procedures or examinations via telemedicine. Telehealth can take place between providers and patients located in clinical settings as well as directly with patients in their homes.

Synchronous (Real-Time)

Requires the presence of both parties at the same time and a communications link between them that allows a real-time interaction to take place. Video-conferencing equipment is one of the most common forms of technologies used in synchronous telemedicine. There are also peripheral devices which can be attached to computers or the video-conferencing equipment which can aid in an interactive examination.

Asynchronous (Store-and-Forward)

Involves acquiring medical data (like medical images, biosignals etc) and then transmitting this data to a doctor or medical specialist at a convenient time for assessment offline. It does not require the presence of both parties at the same time.

Mobile Telehealth Clinics Now In Service

The Cheyenne VAMC has started using a new mobile telehealth clinic to bring primary and psychiatric care to rural veterans in Sterling, CO and Torrington, WY and service is expected to expand to Laramie and Wheatland, Wyoming by the end of the year.

According to David Newman, Cheyenne VAMC Telehealth Coordinator and Mobile Telehealth Clinic Advisor, “Veterans have been hugely receptive to the Mobile Telehealth Clinic. Vets have been taking advantage of the opportunity to save many hours, as well as the risk and expense of driving to Cheyenne or outlying CBOCs.

The Cheyenne Mobile Health Clinic is fully self-contained and conducts Primary Care Medical and Mental health visits simultaneously. The mobile clinic also performs Teleretinal Screening and some laboratory testing. Health care visits are transmitted instantaneously using videoconferencing technology through a land-line connection and eventually a satellite dish that is located on the vehicles roof.

“Many Veterans come by just to look at this example of cutting edge rural medicine,” said Newman. Patients who have already used the mobile clinic have mentioned how impressed they are with the highly trained and motivated Mobile Telehealth Clinic staff said Newman. “Veterans in Laramie and Wheatland Wyoming have been calling and appear very excited about their sites becoming operational.”

-Dave Palazzolo
A Founding Father
The Passing of Dr. David Law
Adam Darkins, MD, MPH, FRCS

VA has undertaken Telehealth activities since 1977. Twenty years later its major adoption into health care delivery in the VA was spearheaded as part of the wider vision of the transforming V A care by Dr. Kenneth Kizer when he was VA’s Undersecretary for Health. The momentum for telehealth development in V A has continued since under successive V A leadership. Telehealth is now mission-critical to the delivery of health care to V eteran patients, especially those in rural and remote areas on the nation. Last year 230,000 V eteran patients received care via Telehealth services from V A. We are currently finalizing a Strategic Plan for ongoing Telehealth development that was informed by face-to-face meetings that took place in Orlando, FL and San Diego, CA during the last 6 months. For many people coming into VA, Telehealth is now a “given” and part of the way care is provided on a routine basis. As with all endeavors there have been key people who fostered the ideas, initial acceptance and further implementation of Telehealth in VA.

One such person was Dr. David Hillis Law IV (Dave Law). I have used the past tense because sadly Dave Law died on Saturday August 22, 2009 at Bay Pines V A Hospice. Dave Law can justifiably be viewed as a “Founding Father” of Telehealth in VA. Let me explain why, both as a tribute to Dave Law but additionally because of the relevance this has to developing Telehealth programs.

Dave Law was born on July 24, 1927 and was therefore 82 when he died. He was an army V eteran who subsequently trained as physician, working in New York and Tennessee before joining the VA as the Chief of Medicine in 1969, in Albuquerque, NM. In 1985 Dr. Law moved to VA Central Office (VACO) as the Director of Medical Services. He is remembered with great af ec- tion by those who worked with him in VACO until he left. He was the Acting Chief Patient Care Officer prior to moving to Bay Pines VA Medical Center as the Associate Chief of Staff for Education in 1996, a position he retained until retiring in 2002.

“I am no longer surprised when people I meet throughout VA mention Dave and give him credit for the way in which he unselfishly provided his mentorship."

This brief bio of Dave Law attests to an erudite and accomplished man who was a leader in his profession. He was undoubtedly these things but he was much more, as a kind, intelligent man who was passionate about the delivery of care. For example Telehealth was on his radar at an early stage and he was part of a small group of 10 individuals who met in Park City, UT 10 years ago, almost to the day, to strategize about Telehealth and its development. Dave freely gave of his advice, contacts and energy back in 1999, and afterwards, extending this support well beyond his retirement.

The photo accompanying this article shows his smile. When I think of him it is his smile that immediately comes to mind. I am no longer surprised when people I meet as I travel throughout VA mention Dave and give him credit for the way in which he unselfishly provided his mentorship. I want to pay tribute to him as a “founding father” of Telehealth in V A and know he was a founding father of many other important initiatives that have improved the care to V eteran patients.

He was a devoted husband to his wife Cindy who predeceased him and their 5 children. He often spoke of them when breaking bread. As a great gastrophile breaking bread with Dave was a great experience.

Telehealth continues to grow in VA. Changing the culture to accept telehealth and embrace it as a way of enhancing care to Veteran patients requires embrac- ing change. Dave Law was an example of so many people we are fortunate to work alongside and to whom we owe the success of what we do. Engineering the technology we use in telehealth is complicated, reen- gineering clinical care and helping people with change is a infinitely more complex. Thank you Dave and thank you all for your energy, integrity and enthusiasm for helping grow and sustain Telehealth programs in VA.
In a continued effort to help bring more resources to the intranet site, the Rocky Mountain Telehealth Training Center has been working to put more of its existing videos onto the web. Coming to the Video section of the intranet site will be “My Life, My Health, My Choices.”

In September , Pat Ryan, Jeff Lowe and David Palazzolo attended the Evolving Paradigms Conference; a VA sponsored, multi-disciplinary training regarding care to OIF/OEF veterans with individuals representing every aspect of VA’s Veterans Health Administration as well as Veterans Benefits Administration, the Department of Defense and Veterans’ Service Organizations.

Care Coordination staff members had the opportunity to explain Telehealth opportunities to a myriad of varying individuals ranging from IT specialists to surgeons to primary care physicians. Lowe even had the opportunity to interface with Dr. Gerald M. Cross, the acting Under Secretary for Health.

The Rocky Mountain Telehealth Training Center has been busy recruiting to fill staff vacancies. Interviews are beginning for the Director position, while interviews have concluded for the Training Specialist and Education Technician positions. The staff will be located in the new primary home of the center at the Denver VAMC in VISN 19.

IN THE NEWS
Telemedical Quality

A statement released by the American Medical Association says examining stroke patients via videoconferencing (telemedicine) is as effective as a bedside exam and can increase patient access to stroke specialists. The statement appears in the May 7 Issue of the journal Stroke.

THE VIDEO ENCOUNTER
Tips and Tricks

Be thoughtful about where you place the microphone. Many video-conference equipment setups have mobile/movable microphones. Don’t put the microphone next to the speaker and don’t place the microphone across the room. If the mic is next to the speaker the person on the other end will have to suffer through a weird echo, if the mic is too far away from you, the person on the other end will have a hard time hearing you. Its best to have the microphone about two feet away from you.
This year the Care Coordination Store and Forward Forum was held back-to-back with the General Telehealth Forum. More than 99 attendees convened in San Diego during the second week in May to discuss programmatic issues and strategic planning for each of the training centers. The CCSF Conference had an additional component this year because 13 Teleretinal Master Preceptors participated in a preconference certification program.

Master Preceptors for this year’s program represented 7 VISN’s and with their successful completion of the preceptor course, (see page 6) the CCSF Boston Training Center now has a total of 24 Teleretinal preceptors from 11 VISN’s. Since the inception of the program in May 2008 preceptors have trained 70 imagers in the field throughout VHA, bringing the total number of imagers involved in the program to more than 300 nationwide. Also in attendance at this year’s course were preceptors from the May 2008 program: Sharadee Hess, Lisa MacPherson, Elida White, Barb Palumbo, Doris Easter and Jennifer Strickland, all of whom participated in both the preceptors program and the general conference that followed. We enjoyed having experienced preceptors at the session, since they provided insight and encouragement to this year’s preceptors by sharing some of their experiences while serving as field representatives of the Boston Training Center.

The conference in San Diego also provided an opportunity to revisit some of the current achievements of teleretinal imaging programs now that more than 300 cameras are deployed nationwide and more than 400,000 veterans with diabetes have been screened. The conference also addressed important issues related to future directions of the training centers and items considered key to the sustainability and expansion of the CCSF programs.

There were two tracts created for this year’s conference, and each was devoted to specific store and forward programs. The format of each tract was similar, with a plenary session addressing a general topic followed by breakout groups for more informal, specialized and individualized discussion on strategic initiatives relating to the topic covered in the plenary session. One tract was devoted entirely to each of the current store and forward programs: teleretinal imaging, the first and most mature program, and teledermatology, the emerging discipline that is coming on board this year.

For teledermatology the discussion revolved around administrative and clinical requirements that will serve to nurture and move the program forward on a national scale. Relying on some of the experience of the pilot sites the discussion included a number of issues related to the need for clinical solutions, such as primary care involvement, the application of standardized history templates, photographic standards, and generation of a suitable program database to provide advice and feedback to promote sustainability of the program as we move forward.

For teleretinal imaging the forum represented a great opportunity to explore other avenues for expanding the CCSF teleretinal programs to include screening for other disorders. Two important items on the agenda generated a lot of interest and discussion. First, we explored the notion of amalgamating services offered by the teleretinal reading centers, i.e., regionalizing centers to consolidate resources and avoid duplication of effort. Another central theme to come out of the forum was the importance of considering teleretinal imaging systems as a platform for screening for macular degeneration and glaucoma, two other sight-threatening conditions that are prevalent in the VA population. It was clear from the conference that while significant effort will be required to establish rigorous validation programs, there is enormous interest and support nationwide within the VA to help carry out expansion of teleretinal imaging.

In 2009 each of the training centers had individual forums that were specific to their individual programs. As has been the tradition in CCS, every other year a larger CCS conference takes place, that includes all three training centers and their representative programs so we look forward to seeing some of you at the next conference in 2010.
Upcoming and Important

December 2009 is National Telehealth and Informatics Awareness Month. This month is a great opportunity to showcase your programs. The Training Center is planning an Open House with Technology Demonstrations. Let us hear about and see photos from your events for our next newsletter.

2009 CCHT Annual Competency Program deadline was September 30, 2009. If you have not already done so please forward the names of staff that have completed the Annual Program to rita.kobb@va.gov or Juanita.bradley@va.gov.

Sunshine Telehealth Training Center

Sunshine Training Center staff have been working for the past 9 months with our 2009 CCHT Master Preceptor candidates. Each of the candidates presented a Leadership Project in May/June and all of the candidates developed materials that are posted on the STC SharePoint. CCHT staff are encouraged to check out these helpful tools. We also have been helping oversee activities for the Rocky Mountain Telehealth Training Center including the 2009 CCGT Master Preceptor class. This class has seven CCGT candidates who will graduate in 2010.

The STC will implement its new Sunshine Support Program in January 2010 and recently released the application packet to CCHT Program Leads and Master Preceptors for dissemination to qualified staff. The deadline for submission is October 30, 2009. This program is designed specifically for CCHT support staff such as program support assistants, health technicians, IT, Prosthetics and other administrative support positions. The program will identify and develop staff to serve in mentoring positions for support staff much like our Master Preceptors do now. This program will run through May of 2010 with graduates honored at the Care Coordination/Telehealth Leadership Forum.

Our second Disease Specific Care-Lessons from the Masters program was in September and it was entitled: “Motivational Interviewing” and was presented by Dr. Elizabeth Santa Ana. The program was excellent and well attended. Our next Lessons from the Masters will be December 8, 2009 with Dr. Scott Shreve, VHA’s National Director for Hospice and Palliative Care.

Sunshine Telehealth Training Center

The national Weight Management Disease Management Protocol based on the MOVE program began its first phase in September. Phase two has just begun and national release is projected for January-February 2010.

DMP Update: MOVEing Ahead

The national Weight Management Disease Management Protocol based on the MOVE program began its first phase in September. Phase two has just begun and national release is projected for January-February 2010.
Master Preceptors

Preceptor is based on the word precept coming from the Latin word “praecipere” which means “to teach” and precept is defined as a principle, a rule of personal conduct, so by definition, a “preceptor” is a teacher who leads by example motivated by personal conviction.

The Care Coordination Services Master Preceptor program uses a rigorous application process, only accepting individuals who show a strong commitment to telehealth, dynamic leadership qualities and technical aptitude. The goal of the Master Preceptor program is to cultivate leaders in telehealth across the Veterans Health Administration at all levels of the organization.

All three Care Coordination Services Programs, General Telehealth, Home Telehealth and Store-and-Forward telehealth are pleased to announce this years applications to the Master Preceptor program.

Robin Bell (VISN 10)
Lynn Hatfield (VISN 19)
Stephanie Maturino (VISN 18)
George Pechulis (VISN 19)
Theodore St. James (VISN 11)
Lynn Wise (VISN 10)
Rhonda Barnes-Bell (VISN 10)
Diane Ibrahim (VISN 18)
Aisha Ortiz (VISN 8)
Shannon Robison (VISN 16)
Misty Spratlan (VISN 16)
Yvonne Williams (VISN 12)
David Wright (VISN 2)

Master preceptors attending the forum along CCSF Boston Training Center staff Renee Warstler, Tony Cavallerano and Chad Parenteau.
Using the Tracer methodology during site visits and reviews of Care Coordination Home Telehealth (CCHT) programs, Care Coordination Services Quality Managers have noted some programs where a high proportion of patients who are enrolled on messaging devices do not answer any of the Disease Management Protocol (DMP) questions on a regular basis but do sometimes submit vital signs data. Thus, they are not really ‘non-responders’ but are, in fact, ‘partial’ responders only.

CCS Quality Managers have reiterated that this pattern of patient response does not meet the intent of the CCHT program for the following reasons, perhaps among others:

- It does not provide sufficient data on which the Care Coordinator can provide Just-In-Time care based on symptoms or trends other than vital signs.
- It does not provide sufficient data for planning, trending or evaluation of care by the Care Coordinator for that individual patient.
- It does not provide information on which the Care Coordinator might act to help prevent or minimize an exacerbation of illness, prevent unnecessary ER visits, admissions or inpatient BDOC.
- It supports old patterns of patient knowledge and behavior that do not tend to lead to patient self management.

These are the same patterns that may have resulted in previous lack of adherence by that patient to the medical plan of care or self management.

- It is inefficient because it requires the Care Coordinator to call the patient to obtain information that might otherwise be available to them via the DMP responses.
- It turns the messaging device into nothing more than a very expensive blood pressure machine, in some cases.
- It does not support the overall intent of the CCHT program nor the manner in which we have represented the program to others such as the Joint Commission.

Quality Managers reinforce the following approaches to this issue during site visits and reviews:

- Care coordinators should be very firm at enrollment in gaining patients’ agreement about the expectation that they respond to all DMP questions daily. Care Coordinators always have the option to allow somewhat less frequent response rates for selected patients over time but this should be the exception and not the rule.
- Care coordinators and support staff must firmly follow up on the requirement for daily responses as a patient responsibility and a necessity for the care coordinator to be able to optimize the effectiveness of their role. Failing to intervene when patients do not supply adequate data may simply reinforce lack of adherence and old patterns of behavior.
- Some vendors’ messaging device software makes it extremely easy for patients to skip the DMP questions so additional emphasis is needed on the part of Care Coordinators and support staff when using such devices. This may require specific instructions for patients about the expectations and process for answering all of the DMP items.
- The particular device, however, is not the major determinant of patient adherence since there have been wide differences seen in adherence rates between programs using the same telehealth device.

As always, it is not the box that makes a difference for patients. It is the Care Coordinator!
It has long been acknowledged that informed and activated patients are better able to achieve healthy outcomes due to improved communication and the development of trust with their care providers. The goals of a good patient education program, which always include education reinforcement, are to provide the knowledge and skills necessary for veteran patients to activate and achieve success. Activating and engaging veterans with uniform and consistent information will set in motion their ability to make the right choices regarding their health and ensure that they are able to reach an acceptable level of quality of life within their disease process.

We all know how demanding it can be to activate and inform veterans who have a chronic disease. Informing and activating veterans with diabetes can be particularly challenging because of the many lifestyle changes that must take place. Through our daily assessment of clinical data and regular interactions with veterans and their caregivers, we work hard to develop and engage veterans in a trusting relationship or partnership to meet treatment goals. Providing appropriate, timely patient education and answering veteran and caregiver questions is a large part of engaging our veterans and helping them to become involved in their own care.

At times accomplishing this may be quite a challenge for care coordinators since they must also manage the care for a large panel of patients who present with a variety of concerns and unmet needs. So it is important to realize that good patient education cannot be accomplished alone and requires partnering and communicating with several different health professionals to activate and engage our veterans effectively.

The Teleretinal Imager is just the health professional that the home telehealth care coordinator is looking for. The Teleretinal imager has been a silent partner in delivering good basic diabetic education since the program began in 2006. The 20 - 30 minute Teleretinal imaging screening encounter provides an important opportunity for substantial patient education, reinforcement, and patient engagement. The imager training curriculum developed and presented by the Boston Training Center staff includes very comprehensive diabetic content. This includes the anatomy of the eye, normal and abnormal biology of the retina, the optic nerve, the retinal vascular supply and macula function. In addition, other important aspects of diabetes, related systemic vascular disorders and potentially sight-threatening diabetic retinopathy are also included in the training content.

Imagers are trained to discuss with the veteran their retinal images and provide an overview of the importance of optimal glycemic control, and the effects of diet and exercise on blood sugar. Appropriately demonstrating the image to the veteran and utilizing posters and brochures in conjunction with the interactive patient education provided during the imaging session is a major focus. This patient educational moment goes a long way in promoting self-efficacy and adherence to the treatment plan! A portion of the imager’s duties is to coordinate and collaborate with the health care team to provide a consistent well thought out teaching plan.

This occurs by acting on the resulted study and consult report but also by sharing important health information with the veteran patient.

This is an ideal opportunity for the home telehealth care coordinator to collaborate with the imager to ensure their CCHT enrolled veterans with diabetes are set up for their annual screenings and also to ensure that patient education messages are conveyed in a coordinated manner. The Teleretinal imager can reinforce certain critical diabetic information that you as a care coordinator may deem especially important.

Since most people are rarely able to absorb all of the necessary information in a single session, care coordinators must consider many strategies for reinforcement and to integrate critical patient education messages throughout the course of patient care. The ultimate goal is that patients will become more actively engaged in their self care throughout the process. Patients do have the right to be given every opportunity to learn as much about an area as they would like and to retain the volume of information necessary to be healthy and safe. Teleretinal Imagers can be invaluable in this process of activation and engagement. Taking full opportunity of this advantage truly provides high quality, patient focused care.

Providing good patient education takes a team, with everyone working together to provide consistent, uniform and understandable information as the patient presents and moves through the system. The benefits of a collaborative, multidisciplinary approach to patient education that serves veterans, their families and providers cannot be overstated.

Given the high prevalence of Diabetes in VHA (20 % of the veteran population compared to only 7 % of general population) and the complexity of Diabetic information today, patients should be given ample time and provided multiple opportunities to receive this information and to learn of any updates as necessary to enhance their understanding and enable them to be better participants in decisions regarding their Diabetic self management care and lifestyle.
Office of Care Coordination Services - Overview

The Office of Care Coordination Services (CCS) uses health informatics, disease management and telehealth technologies to target care and case management to improve access to care, improving the health of veterans. Care Coordination changes the location where health care services are routinely provided. This is done to provide the right care at the right time, accessible to patients in their own homes and local communities. The Office of Care Coordination Services, located in Washington DC, divides Telehealth into three smaller modalities and has established training centers for each to support the provision of quality telehealth-based care to veterans:

• Care Coordination General Telehealth
  is essentially "real-time telehealth" where a telecommunications link allows for instantaneous, or synchronous, interaction between the patient and the provider or even two providers regarding a single patient, typically via videoconferencing. The Rocky Mountain Telehealth Training Center provides training and support to staff involved in the delivery of general-telehealth services.

• Care Coordination Home Telehealth
  is essentially "remote monitoring telehealth" where telehealth technologies are used to communicate health status and to capture and transmit biometric data. Devices are placed into the homes of veteran patients, typically, with chronic diseases such as diabetes, heart failure and chronic pulmonary disease and are monitored by care coordinators. The Sunshine Telehealth Training Center provides training and support to staff involved in the delivery of home-telehealth services.

• Care Coordination Store-and-Forward Telehealth
  is where digital images, video, audio and clinical data are captured and "forwarded" to a medical facility at another location where they are studied by relevant specialists. The Boston Store-and-Forward Telehealth Training Center provides training and support to staff involved in the delivery of store-and-forward-telehealth services.

Our Mission

To provide the right care in the right place at the right time through the effective, cost-effective and appropriate use of health information and telecommunications technologies

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