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.

New Intranet Page www.telehealth.va.gov
Intranet Resource For The VA Telehealth Community

The Office of Telehealth Services is very excited to announce our new VHA Intranet site. We listened to what you were saying and did our best to reorganize our information in the way you expected to find it.

Instead of information being arranged based on telehealth modalities, content is now organized by specialty. So, for example, if you are looking for information about Teleprimary Care or Teleretinal Imaging, a main menu link from the front page will take you to a page that organizes all the information regarding that specialty; everything from technical documents, clinical guidance and training resources.

We’ve also added several new features including a “Telehealth In The News” section that provides summaries and links to national and localized media outlets that have focused on telehealth, emerging telehealth technology, telehealth in the VA and even controversial national and global telehealth press. Articles are listed chronologically but can be sorted by topic. You can even subscribe to an RSS feed.

Additionally, we’ve added a section on how we are implementing Secretary Shinseki’s T-21 Initiatives, reorganized our video resources to help you find and view our web-based videos, and reorganized training resources to make it easier to get training you want and need.

Most excitingly we’ve integrated our intranet page with our SharePoint resources. This allows us to manage document libraries, contact lists and collaboratively developed content using SharePoint’s powerful sharing capabilities and having those changes be instantly reflected on our Intranet page, this means that every document listed on our intranet page will be the most accurate and up-to-date.

Please visit our intranet page at www.telehealth.va.gov and if you have any questions or feedback, please let us know. (www.telehealth.va.gov coming soon).
IN THE NEWS

Cellphone Photos to Deliver Care?

Rohan Giare rolled off his bed and gashed the bridge of his nose. Rohan’s dad, not knowing whether he should focus on getting the bleeding to stop or go immediately to the emergency room, snapped pictures of the cut with his BlackBerry and sent them to his doctor friend, Neal Sikka.

Sikka, an emergency physician at George Washington University, looked at the photos and recommended a trip to the hospital.

Sikka has gotten comfortable using his camera phone to make informal diagnoses for friends and family since he became a doctor in 1999. And as he embraced cellphone culture, Sikka said, he wondered if he could confidently and consistently make diagnoses if regular patients sent him injury snapshots.

In May, Sikka began a six-month study examining how accurately emergency doctors and physician assistants at GWU Hospital could diagnose wounds from patient-generated cellphone images. According to Sikka, it is the largest “mobile health” study looking at acute wound care.

"Mobile health" does not mean a clinic on wheels. It is an emerging field within telemedicine that comprises all aspects of care generated from or available on a portable mobile device such as a cellphone.


Telehealth in the VA

Telehealth Continues to Make Its Mark

Adam Darkins, MD, MPH, FRCS

As fiscal year 2010 draws to a close and we prepare for fiscal year 2011 and beyond, as is customary we need to take stock of where we have reached and fix our sights on where we plan to go. FY2010 has been another momentous year in the onward progression of telehealth in VA.

The crux of the significance of Telehealth to VA is in the number of Veteran patients who receive care. Final figures for the year are not yet available but we are projecting in excess of 300,000 patients receiving care.

Expansion of care to Veteran patients in rural areas will rise by greater than 20% over FY2009 figures.

Veterans continue to show satisfaction levels above 85% for Care Coordination Home Telehealth (CCHT), 90% for Care Coordinationation Store-and-Forward (CCSF) and a Clinical Video Telehealth (CVT) satisfaction survey is ready to implement.

VA’s weight loss program, TeleMove, was piloted on home telehealth programs and is now rolling out as a national program.

VA’s resource allocation system, VERA (Veterans Equitable Resource Allocation), recognized care for chronic mental illness provided via clinical video telehealth and is anticipated to do so for CCHT in FY2011.

A memorandum of understanding (MOU) and a service level agreement (SLA) for CCHT were agreed and enacted between VA and VA Office of Information Technology. Similar MOUs’s and SLAs are imminently anticipated for CVT and CCSF.

A mechanism for privileging across sites in VHA for Telehealth has been formulated for anticipated use in FY2011.

A model for teleaudiology was developed in FY2010 and is due for widespread pilot in FY2011.

New disease management protocols for substance use and dementia have been finalized.

"The crux of the significance of Telehealth to VA is in the number of Veteran patients who receive care."

Reductions in bed days of care associated with CCHT are in excess of 40% on pre-enrolment figures for our current CCHT population receiving care.

VA’s National Telemental Health Center was established in West Haven, CT and is operational, providing pain management services.

A pilot for IP Video into the Home as part of VA’s CCHT program is currently under development.

VA’s conditions of participation continue to provide a robust and discriminating tool to ensure the quality and consistency of VA telehealth programs.

Tele-ICU programs are under development in four VISNs.

VA’s three telehealth training centers provide over 2,000 staff trainings annually, of which over 90% takes place using virtual educational modalities that are employed in collaboration with VHA’s Employee Education System.

Work is ongoing to interface, and where necessary integrate, telehealth into VA’s Patient Aligned Care Team implementation.

As we prepare for FY2011, we are drawing upon the successes of FY2010 in adding to the solid foundations upon which we can continue to build telehealth services. A vital part of our expansion plans are in collaborating with the Patient Aligned Care Team, Rural Health and Specialty Care initiatives that are rolling out in FY2011. Targets for telehealth growth are expected to be finalized in the coming weeks.

Therefore, as we close out FY2010 and prepare to embark on FY2011, attribution for our success in FY2010 is due to the programs at the facility and VISN levels throughout VA. It is our privilege as a program office to support them in furtherance of the noble mission of the organization we belong to, that of serving Veterans. The mark of what we do is in the increased access to care that Veterans receive, reductions in their need to travel and the enhanced quality of care they can expect.
The Master Preceptor program has been revised this year and we are looking forward to the national projects they will be working on and presenting at the National Forum this year.

Secondly, the Rocky Mountain Training Center is offering several new Accredited Clinical Video Telehealth Certification programs, courses and training opportunities based on the field’s responses and needs over the past 6 months. Examples of the programs are:

- Master Preceptor
- Train the Trainer
- Facility Telehealth Coordinator
- TeleHealth Clinical Technician
- Advanced Technology

For more information please access the intranet site at: vaww.telehealth.va.gov/training/rmttc/cert/

Over the past year we have filled the training center staff vacancies and would like to introduce our staff. The staff come from many different areas of clinical and technical expertise. They are very excited to be available to meet your Clinical Video Telehealth training and education needs. The staff includes:

**Lana Frankenfield LCSW**

Clinical Training Specialist (Lana.Frankenfield@va.gov), her areas of expertise are Mental Health, Rehabilitation, SCI, TBI, Patient Education, Move, Pharmacy and Master Preceptor. She also conducts many forums such as Hot Topics, Orientation and the Telemental health Journal Club.

**Tammy Stueve RN**

Clinical Training Specialist (Tamara.Stueve@va.gov), her areas of expertise are Cardiac, Endocrinology, Primary Care, Podiatry, Neurology, Surgery and Pulmonology (to name a few).

**Michael Lewis**

Technology Training Specialist (Michael.J.Lewis@va.gov) whose areas of expertise are Clinical Video Telehealth technology (beginning and advanced), clinical and technology skill assessments the roles of the Telehealth Clinical Technician and Facility Telehealth Coordinator.

---

**2010 Master Preceptors**

A part of the Mission of the Rocky Mountain Training Center is to provide quality Clinical Video Telehealth Education, Resources and Training.

Over the past six months there have been many new and innovative happenings we would like to share with you.

First of all we are proud to announce the 2011 Master Preceptors and congratulate them on their selection. They are:

- Broder, Kevin VISN 22
- Fiedler, Jim VISN 22
- Giovaniello, Kelli VISN 21
- Gladden, Chad VISN 12
- Glenn, Yvette VISN 11
- Hernandez-Alvarez, Gabriel VISN 08
- Kurnet, Richard VISN 18
- Lindsey, Jana VISN 21
- McBee, Robert VISN 15
- Pechulis, George VISN 19
- Riegler, Lindsay VISN 10
- Robinson, Dean VISN 16
- Ronzo, Joe VISN 20
- Schwartz, Miranda VISN 21
- Williams, Heidi VISN 10
- Whongi, Andy VISN 19
- Wienke, James VISN 12

The Master Preceptor program has been revised this year and we are looking forward to the national projects they will be working on and presenting at the National Forum this year.
The Office of Telehealth Services’ Boston Training Center has been extremely busy this quarter, working with our content experts and Employee Education System (EES) partners to place another one of our didactic Teleretinal courses on the Learning Management System (LMS).

The Overview of Diabetes and Diabetic Retinopathy, is now one of the Core Curriculum classes for the Teleretinal Imagers’ program. Prospective Teleretinal Imagers and Master Preceptors are now able to complete this class online, at their own pace, and at a convenient time for them. We continue to work with EES to add additional courses to LMS, which will decrease the need for Live Meeting didactic presentations.

Additionally, four experienced Teleretinal Imagers from VISN 7 and VISN 15 traveled to Boston in August for two days of intensive training at the Boston Training Center for the completion of the Teleretinal Master Preceptor program. An additional group of 12 imagers will travel to Boston at the end of October to complete the program.

We look forward to the addition of these expert trainers who will join the more than 50 Master Preceptors currently doing an outstanding job representing the Boston Training Center nationally. At the conclusion of the current Master Preceptor course for teleretinal imagers, all but one VISN (VISN 5) will have at least one Master Preceptor for teleretinal imaging.

Store-and-Forward Master Preceptors
Misty Spratlan, a Master Preceptor from Houston, (VISN 16) presented the July Boston Training Center continuing education program. Her presentation, entitled “Patient Recruitment for a Successful Teleretinal Clinic,” was widely popular and very well received, with over 90 participants in attendance for this important and practical CE program.
Sunshine Telehealth Training Center

We had a great annual conference. It was wonderful to meet many of you for the first time and to see the tried-and-true as well. Our Annual Competency Program, “It’s a Jungle Out There”, was a big success. Thanks to all who participated in the CCHT Strategic Planning Sessions. Your feedback was invaluable to the development of our FY11 plan. During the conference, we recognized our current Master Preceptors and VISN Leads for their continued support and participation. We also were proud to honor our first class of Sunshine Support Preceptors (see photos). Congratulations to EES and all attendees for making the conference such a success.

American Telemedicine Association Meeting & Exhibition:
The training centers had two abstracts selected for presentation: Telehealth Training Centers: Growing and Sustaining a Competent Telehealth Workforce, presented by Jeff Lowe, Tony Cavallerano & Rita Kobb and Developing Telehealth Super Users: A Veterans Health Perspective presented by Richard Medeiros, Dede Stallings & Rita Kobb.

In addition to the presentations, the training centers supported the Office of Health Information’s booth during the exhibition. We talked with many professionals from all over the country about VHA’s Telehealth Programs.

2010 Advancing CCHT Practice Continuing Education Series
We started this series in July with Case Management for Disease Specific Care. In August, we had a Palliative Care and PTSD Update, followed by Creating Care Coordination Plans in September. Please check the training centers’ SharePoint events calendar for the dates, times and meeting links: http://vaww.infoshare.va.gov/sites/telehealth/stc/

DMP Update
Disease Management Protocol
The Spanish version of TeleMOVE Weight Management is scheduled for release in early August and the Spanish version of Substance Use Disorder will be available late August early September. We are currently testing the following DMPs with patients: Heart Failure and Mild TBI with Spinal Cord Injury scheduled to begin testing later this month. We have two new requests for development of Hepatitis C and Chronic Kidney Disease DMPs.

National Telehealth & Informatics Awareness Month is November 2010 which is also National Caregivers Month. This would be a great time to share your program and what you do for caregivers with staff in your areas. Looking for ideas with an activity for this month contact us in the Sunshine Training Center.

Upcoming Events

National Telehealth & Informatics Awareness Month is November 2010 which is also National Caregivers Month. This would be a great time to share your program and what you do for caregivers with staff in your areas.
June 4-6 was a special weekend in East Tennessee. It marked the 1st Annual Vietnam Veteran Homecoming, which was a long overdue thank you to many Veterans. The Mountain Home VA Care Coordination team was fortunate to get involved. We thanked, greeted, shook hands, and offered small tokens of thanks to our Veterans and their families. It was an overwhelming experience for our staff as well as the Veterans themselves. For some it was the first time in 40+ years they had gathered and mingled with other Veterans. It was a time for healing, sharing, and talking about services they provided but had never been thanked for.

One Veteran told us how he had been called names and actually was spat on by the Americans he had gone halfway around the world to protect. They were told to take off their uniforms before landing as some Americans might be unkind to them as they came through the airports. A widow of one former patient came and thanked us for the CCHT Program. She told us without CCHT she and her husband could not have made it the last two years of his life. The technology and their care coordinator helped her husband stay at home instead of having to go to a nursing home. She told us, “I can’t tell you how we appreciated the care and all the help they gave us both!”

So what was this weekend and how did it all come about? The local chapter of “Rolling Thunder”, a motorcycle riding group of Veterans who are associated with the Fountain of Life Church and other organizations planned and presented a wonderful weekend. The festivities began with a parade, and continued with ceremonies, music, fireworks, and appreciation for the great service the Vietnam Veterans gave to our country. The Care Coordination team spearheaded our local VA participation and it was a wonderful opportunity for us to give thanks to all the Veterans who visited our area. This allowed men and women of all ages, from every branch of service and many decades of service to get a handshake, a hug, a ribbon, a spirit bracelet, or other goodies and a BIG THANK YOU for all they did for our nation.

For the care coordination staff, we were able to get a huge dose of admiration for the pain many of these servicemen and women have endured for over 40 years. Hearing stories of PTSD, depression, bitterness, and heartbreak was heart wrenching and humbling yet so powerful. If you ever wonder why you work at a VA just talk to the patients we serve. They can offer a red-white-&-blue moment that will be unforgettable! We were all hot and tired by the end of each day but so proud to be working with these Veterans!
Quality and Performance

Results of the FY10 CVT Satisfaction Survey Pilot
Carla Anderson, MSN, RN

Early in FY10 a work group was convened to brainstorm about how to best capture Veterans’ satisfaction with care received via clinical video conferencing (CVT) visits. The workgroup was charged with developing a survey tool that could be used nationally in any clinic setting. This survey tool would need to be easily read and understood by Veterans as well as quick to complete to avoid adding any extra burden or stress to Veteran patients.

Due to the unique care delivery modality and other technological aspects of the CVT program, a complete new set of survey questions had to be created. The Office of Management and Budget (OMB) pool of nationally approved satisfaction survey questions, along with other informal pilot CVT survey tools from VISN 8 and 21, were used to develop a new and improved satisfaction survey. The Rocky Mountain Telehealth Training Center (RMTTC) developed the actual questionnaire, formatting and structuring the questions for readability and to trigger reliable and valid responses. Demographics such as the actual site of care, Veteran age, gender, clinic type and number of sessions were collected. Instructional materials for both the Veteran and clinic support staff at the point of care were developed and included in the satisfaction survey packet. Self-addressed, stamped envelopes were provided in the packet of materials so Veterans completing the survey could be assured that their responses and comments were kept confidential.

After receiving approval to proceed from Office of Telehealth Services, a patient satisfaction survey pilot was planned for FY10 2nd quarter. VISN 7 and VISN 19 CVT leads volunteered their networks as the pilot sites. Both of these CVT leads, Ellen Clements and Susan Blaney, took the initiative to develop a mechanism for easy distribution and collection of the surveys at each of their CVT clinics/sites. Education and training of staff was an important aspect of the pilot success.

FY 10 CVT Satisfaction Survey Pilot Results
For VISN07 and VISN19 Pilot Sites

- Total Number of surveys distributed = 420
- Responses Received = 169
- 40% Response rate overall
- 28 sites responded; 72% of the CVT sessions were individual; 12% group clinics
- 62% did not disclose the name of their specialty clinic; 15% reported they were in Mental Health
- 8% of respondents were female; 88% were male
- 22% of respondents were 18–50 years old; 72% of respondents were 51 years or older

The results indicate high levels of satisfaction in VISN 7 and VISN 19 in all questions but the last question (12). Based on the way question 12 was worded, as well as its location within the questionnaire, a low satisfaction score may have resulted, although this is not confirmed. The workgroup plans to re-word this question in the next survey edition to match the structure and format of the previous questions to see if that will impact results.

The new wording in the final version of the CVT satisfaction survey tool will be “I would rather use telehealth to receive this service than travel long distance to see my provider.”

CVT Survey Questions

<table>
<thead>
<tr>
<th>VISN07</th>
<th>VISN19</th>
</tr>
</thead>
<tbody>
<tr>
<td>% That Agree or Strongly Agree</td>
<td>% That Agree or Strongly Agree</td>
</tr>
<tr>
<td>1. I felt comfortable with the equipment used</td>
<td>98%</td>
</tr>
<tr>
<td>2. I was able to see the clinician clearly</td>
<td>94%</td>
</tr>
<tr>
<td>3. I was able to hear the clinician clearly</td>
<td>93%</td>
</tr>
<tr>
<td>4. There was enough technical assistance for my meeting with the clinician</td>
<td>96%</td>
</tr>
<tr>
<td>5. My relationship with the clinician was the same during this session as in person</td>
<td>75%</td>
</tr>
<tr>
<td>6. The location of the telehealth clinic is convenient for me</td>
<td>94%</td>
</tr>
<tr>
<td>7. My needs were met during the session</td>
<td>88%</td>
</tr>
<tr>
<td>8. I received good care during the session</td>
<td>96%</td>
</tr>
<tr>
<td>9. The telehealth clinic provided the care I expected</td>
<td>90%</td>
</tr>
<tr>
<td>10. Overall, I am satisfied with this telehealth session</td>
<td>87%</td>
</tr>
<tr>
<td>11. I would recommend this type of session to other Veterans</td>
<td>87%</td>
</tr>
<tr>
<td>12. I would rather travel to see my provider than use telehealth</td>
<td>75%</td>
</tr>
</tbody>
</table>

Other pertinent but expected information included that Veterans who used Telehealth had the following results: reduced travel and cost; fewer missed appointments and reduced stress. Most respondents that they or their caregiver would have to miss work and incur extra expense if they would have to travel to see their providers. Questions referring to this information will not be included in the next edition of the survey since this information is well known.

The next steps will be to formulate a plan on how CVT satisfaction surveys will be distributed across the nation for all VISNs to gain useful data for performance improvements. A justification that describes the CVT satisfaction survey tool and process, the overall burden on Veterans and the annual cost to the VA will be completed for OMB approval as the last and final step.

Under the Paperwork Reduction Act of 1995, the OMB is charged with regulating and policing the collection of information from the public. This applies to surveys designed to improve how services to the public are delivered. Any survey that involves 10 or more respondents and uses the same questions repeatedly (e.g., in a questionnaire) will need approval prior to use. Applications to OMB must include a final or near-final questionnaire, estimates of the average time to complete the survey (from the pilot) and the annual number of respondents you hope to have (not the targeted sample but those who actually respond). Finally, the process includes multiplying the average time/survey times by the expected number of respondents to calculate the expected “citizen burden hours”. Overall, the application process is lengthy and time consuming.

It continues to be a long journey for the CVT satisfaction survey process, but well worth the time and effort spent as CVT programs continue to be established across the country and continued growth is expected. The data received from this survey tool will be very useful to CVT program managers, providers and support staff to help direct critical improvements as we all work together to provide Veteran centric care through CVT.
Office of Telehealth Services - Overview

The Office of Telehealth Services (OTS) 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/Telehealth 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 Telehealth Services, located in Washington DC, divides Telehealth into three modalities and has established training centers for each to support the provision of quality telehealth-based care to Veterans:

- **Clinical Video 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 Clinical Video 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.

- **Store-and-Forward Telehealth**
  is where digital images, video, audio and clinical data are captured and “stored” then transmitted securely (“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.